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# Amateur Radio

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AUSTRALIA

For the Experimenter
and Radio Enthusiast

9D.

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## WI BROADCASTS

**All Amateurs are urged to keep these frequencies clear during, and for a period of 15 minutes after, the official Broadcasts.**

**VK2WI:** Sundays, 1100 hours EST, 7146 Kc. and 2000 hours EST 50 and 144 Mc. No frequency checks available from VK2WI. Intrastate working frequency, 7125 Kc.

**VK3WI:** Sundays, 1130 hours EST, simultaneously on 3573 and 7146 Kc. and re-broadcast on 50 and 144 Mc. Intrastate working frequency 7135 Kc. Individual frequency checks of Amateur Stations given when VK3WI is on the air.

**VK4WI:** Sundays, 0900 hours EST, simultaneously on 7146 and 14342 Kc. 7065 Kc. channel is used from 0930 to 1030 hours each Sunday for the W.I.A. country hook-up. No frequency checks available.

**VK5WI:** Sundays, 1000 hours SAST, on 7146 Kc. Frequency checks are given by VK5DW by arrangements only on the 7 and 14 Mc. bands.

**VK6WI:** Sundays, 0930 hours WAST, on 7146 Kc. No frequency checks available.

**VK7WI:** Sundays, at 1000 hours EST, on 7146 Kc. and 146.5 Mc. No frequency checks are available.

# AMATEUR RADIO

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### EDITORIAL

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## OBSERVATIONS

For security reasons Australians generally—and Radio Amateurs in particular—have not been officially invited to take part in the Atomic Tests at Monte Bello. However, Federal Executive feels confident that the large force of trained observers represented by the Amateur fraternity may, by mass observation, supply some very interesting and valuable data relative to the effects of electromagnetic disturbances caused by the sudden release of so much radio active energy.

By noting carefully any change which takes place in propagation conditions and recording faithfully and methodically any unusual phenomena observed during and after the tests, Amateurs will have taken the first step. However, unless this information is forwarded to a central point for correlation, the effort will have been wasted.

Therefore the second step is to forward every scrap of information —no matter how insignificant it may appear—to your Divisional Ionospheric Officer as soon as possible. He will then forward it to the Federal Officer for final collation.

Remember! Most of the great discoveries in the scientific world have been made by trained men perusing and collating the results achieved by the observations of others, and gleaning therefore a clue leading to a final solution.

The Radio Amateur of Australia represents a unique force of trained observers spread over the entire continent and the territories beyond. Who else is better equipped to undertake the task of filling in the gaps which will enable our Ionospheric Prediction Service to provide even more accurate results than at present achieved, and extending these predictions to the troposhere, wherein the future of Amateur activity lays?

Brother Amateur, overcome your natural aversion to committing yourself to paper and add your mite to the pile which may well kindle the flame of enthusiasm and open the door to a new field of activity.

FEDERAL EXECUTIVE.

## *THE CONTENTS . . .*

# The Amateur Emergency Network of the W.I.A. (Victorian Division)

By R. T. BUSCH,* VK3LS, Emergency Network Co-ordinator

It is proposed to divide this article into two parts: the first part on organisation and past accounts of the emergency network of Victoria, and the second on a technical presentation of material which it is hoped will assist other Amateurs in Australia who are interested or who are about to become interested in emergency work.

**PART ONE**

The object of the Amateur Emergency Network is and has been to provide communications between country centres, country centres and the capital of Victoria—Melbourne—and, where necessary, between State capitals. Most emergency work to date has been at country centres, where stations operating in that particular zone in which the country centre is situated have gone out into the field and worked back to the base station situated in the country town. There have been instances where the base station has had to relay, or pass on, or seek advice from the capital, and this has been made possible by communicating with the Institute station in Melbourne.

It is felt that the emergency network could be expanded further throughout Victoria, and it is felt also that the presentation of this article will act as a guide to the formation of zone nets in parts of Victoria which, at the moment, are not covered.

It is desired to point out that the establishment of emergency nets in the 3.5 and 7 Mc. frequency bands is easier due to the fact that most Amateurs already have communication receivers and equipment which, without very much work, can be modified for emergency work.

A communications emergency occurs whenever normal facilities are interrupted or overloaded, and may or may not involve a general public participation. Many problems of the community at large can be handled, and have been handled, by Amateur Stations from time to time. Official messages from Police, Military, Country Fire Authority and the Forests Commission having absolute priority in an emergency.

In emergency operating, a fine sense of discrimination is necessary. The desire to help through transmitting participation is often a very dangerous thing. Careful listening locates stations, places and nets, and keeps the use of the emergency frequencies to a minimum, thus permitting the handling of traffic efficiently to and from an emergency area. Talking it over, i.e. general talk, should be reserved until the emergency condition has passed. Organisation should avoid unnecessary duplication of channels, and messages should be routed from point to point, by a single channel if possible, to eliminate duplication or repetition of the same message.

The function of an Amateur Station in handling point to point information efficiently is to observe secrecy so as to ensure that information will not be misconstrued and thus lead to the commencement of rumours. It is important that the originating station or stations number their messages and put them on the standard form. This makes the work systematic and respected, and takes it out of the "hit or miss" category into which casual exchanges fall in the minds of recipients. It is improper to delete essential limiting words from a message, or to expand it, or to exaggerate or alter its meaning.

The best service that can be given by Amateurs under emergency conditions is to man a few fixed best-situated stations, with Amateurs in organised shifts, rather than to man inadequately too many Amateur Stations, which will result in overworked operators creating bad congestion. Zone co-ordinators should aim to create an organised operator reserve for general emergencies.

When first making an emergency call, it is recommended that the emergency call of QRRR be used in preference to the indiscriminate CQ callings. It is also recommended that the emergency frequencies of 3501 and 7002 Kc., situated at the band edges, be utilised for emergency callings. If other networks operating in emergencies desire to use these frequencies for calling, it is suggested that the particular zone in which the emergency has arisen transfer or shift frequency to that particular zone's frequency.

This has been done from time to time, and has allowed the emergency frequency to be made available for any further QRRR calls.

Amateur Stations forming a zone network must be willing to contribute unselfishly to the success of the group's objects, and must be guided entirely by the word of the zone co-ordinator. As mentioned previously, a common—or nearly common—frequency is desirable, and a time for tests and exercises should be selected which suits the majority of the operators and **avoids** the time of operation of other networks in nearby territories.

The successful operation of a net depends to a large degree on the zone co-ordinator, and this station should be chosen carefully. The zone co-ordinator should be a person who will not hesitate to enforce each and every net rule and who will set an example by his own operating. The position of zone co-ordinator is generally assigned to the eldest member of the net, but it may be assigned to any station that can best fulfil the duties. It is important, though, that as operators become experienced, they should have the opportunity to serve as acting zone net control station so as to become familiar with the duties and to thus enable any one of them to act in that capacity should the necessity arise.

If the net control station does not take control within three minutes of the time set for the beginning of the schedule, any station present should take charge and begin regular net operation. As soon as the net control station enters the net, the acting net control station should make a report of the stations in the net and other necessary information, after which he should turn over control to the authorised station.

After the establishment of the zone net, and smooth operation can be assured, it is the duty of the zone co-ordinator to contact the bodies to be served. This can generally be covered efficiently by notification to the local

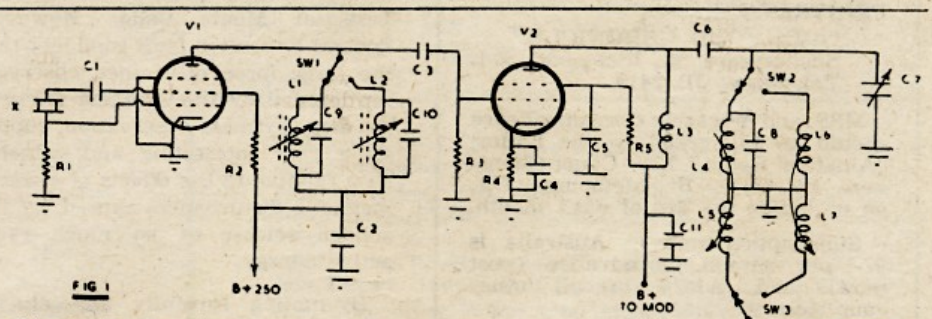



FIG 1

C1—0.003 uF. mica.
C2, C4, C5, C6, C11—0.006 uF. mica.
C3—100 pF. mica.
C7—100 pF. variable.
C8—50 pF. mica.
C9—30 pF. air trimmer.
C10—30 pF. air trimmer.
R1—100K ohm, 1 w. carbon.
R2—50K ohm, 1 w. carbon.
R3—25K ohm, 1 w. carbon.
R4—200 ohm, 3 w. w.w.
R5—10K ohm, 1 w. carbon.

L1, L4—3.5 Mc. tank.
L2, L6—7.0 Mc. tank.
L3—R.F.C.
L5—3.5 Mc. aerial coupling.
L7—7.0 Mc. aerial coupling.
Sw1, Sw2, Sw3—2 position ganged switch.
V1—6AU6.
V2—6AQ5.
X—3.5 Mc. Crystal.

* 5 Hillsyde Parade, Nth. Essendon, W.6.

branch of the Victoria Police Department, which body takes control in the event of emergencies. It might be wise, however, to make known the existence of the net to the Country Fire Authority, the Forests Commission, and ambulance bodies of the district and to make available to them information as to the extent of the Amateur facilities, with addresses and individual telephone numbers, and to ascertain from them what their possible requirements may be in the event of emergency conditions arising.

Over the last three or four years, the Victorian Division of the Wireless Institute of Australia Emergency Network has rendered assistance to various bodies throughout Victoria. The North-Eastern part of the State has been capably served by that particular zone, and valuable assistance has been given to the Victorian Railways and the Country Fire Authority. The Eastern part of Victoria has been covered in various emergencies by Amateurs residing in that zone. Valuable assistance has been given to the Police on numerous occasions and recently this zone network gave unlimited assistance to the Victoria Police in the recent disastrous floods. The South-Western Zone has, from time to time, rendered assistance, and the Central Western Zone has been instrumental in getting messages through to Melbourne when ionospheric conditions were such that direct contact was not possible.

It might be pointed out that the network in general has given assistance to the following bodies: State Electricity Commission of Victoria, Victoria Police Department, Country Fire Authority, Postmaster-General's Department, and the Victorian Railways. The assistance that has been rendered has not passed unnoticed, the daily papers have contained accounts of these activities, and it might be mentioned that the Chief Commissioner of Police has, on two occasions, expressed his appreciation, and that of his Department, of the wonderful assistance rendered by Amateur Radio Operators.

In concluding this section of the article, it is desirable that zones should keep the Victorian Emergency Network Co-ordinator in Melbourne advised of changes in the organisation of their respective zones, and should also forward, as rapidly as possible, full accounts of emergency activities.

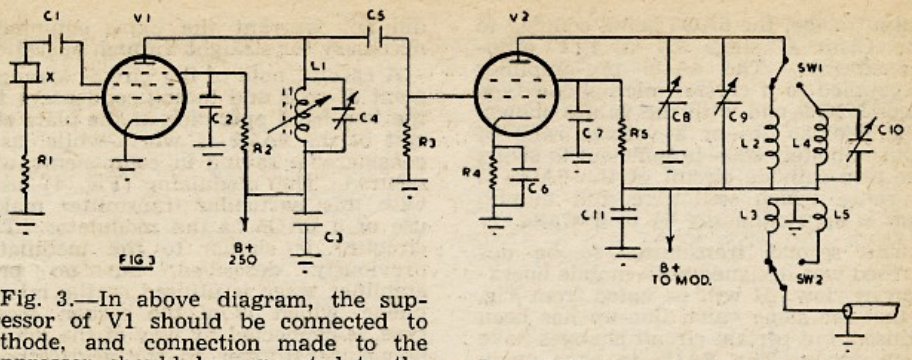



Fig. 3.—In above diagram, the suppressor of V1 should be connected to cathode, and connection made to the suppressor should be connected to the screen.

C1—0.001 uF. mica.
C2—100 pF. mica.
C3, C6—0.01 uF. mica.
C4—Philips' 3-30 pF.
C5—200 pF. mica.
C7—0.005 uF. mica.
C8—0-88 pF. air trimmer.
C9, C10—80 pF. variable.
C11—0.006 uF. mica.

R1—250K ohm, 1 w. carbon.
R2—30K ohm, 1 w. carbon.
R3—50K ohm, 1 w. carbon.
R4—200 ohm, 3 w. w.w.
R5—10K ohm, 1 w. carbon.
L1, L4—3.5 Mc. tank.
L2—7.0 Mc. tank.
L3—7.0 Mc. aerial coupling.
L5—3.5 Mc. aerial coupling.
Sw1, Sw2—3 position ganged switch.
X—3.5 Mc. crystal.

## PART TWO

## TRANSMITTERS

The two transmitters to be described have been designed specifically for emergency use for either fixed (base or portable) and mobile operation respectively. Simplicity and reliability were the two main design points that were considered, and further consideration was given to the use of components that could be secured readily and replaced in the field.

The valves used in the transmitter are of a normal receiving type and are available from local radio service stores and distributors in most country towns. The first transmitter to be described can be used for base operation where low power is a consideration, or for portable operation. The transmitter requires 6.3 volts for the heaters and from 250 to 300 volts for the high tension supply.

It will be noticed from Fig. 1 that the two valves around which this circuit has been developed are the 6AU6 and the 6AQ5. The 6AU6 is used in a modified Pierce oscillator circuit, utilising the screen grid, the control grid and the cathode for the triode section of the oscillator, and having the plate electron-coupled to the oscillator circuit.

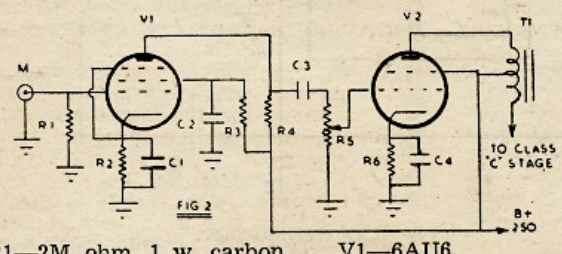
In the setting up and adjustment of this circuit, it was found that reliable and stable operation of the crystal could be obtained without the use of the normal regeneration or feedback control condenser, which is usually connected between the screen of the valve and earth. The crystal used is ground for the 3.5 Mc. band and, for straight-through operation at the crystal frequency, the plate tank of the 6AU6 is pre-tuned to the crystal frequency. When harmonic operation is required —that is, 7 Mc.—the tank of the 6AU6 is switched to take in another pre-tuned circuit tuned to 7 Mc. The output stage is resistance-capacity coupled to the 6AU6.

It will be noted that the tank circuit of the power output stage is shunt fed. This was purposely arranged so that the tuning condenser could be operated at ground potential. The values of all components shown were experimentally ascertained, and were found to give optimum results. To protect the 6AQ5 in the event of a crystal oscillator failure, i.e., loss of grid drive, cathode bias was introduced. The ohmic value shown is sufficient to reduce the plate current of this valve to approximately 30 Ma.—well within the Class A rating of the valve.

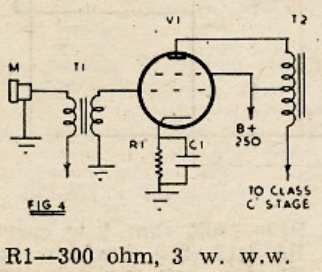
Two pre-tuned tanks are also incorporated in this section of the circuit, so that correct valve loading could be obtained and inductive coupling is used to couple the antenna to the output tank circuit. With 300 volts applied to this transmitter, all components and valves are operated within their normal ratings and an input of approximately 40 Ma. can be obtained when the 6AQ5 stage is adjusted for phone operation.

Neutralisation has not been introduced. This was found to be unnecessary when the output valve was loaded with the aerial circuit. The 6AU6 crystal oscillator amplifier develops approximately 1½ Ma. of grid drive with the value of grid leak shown, and this gives satisfactory operation under modulated conditions.

The modulator (Fig. 2) used with this transmitter consists of a 6AU6 as a pre-amplifier driving a 6AQ5 in the




R1—2M ohm, 1 w. carbon.
R2—2K ohm, 1 w. carbon.
R3—1M ohm, 1 w. carbon.
R4—500K ohm, 1 w. carbon.
R5—500K ohm potentiometer.
R6—300 ohm, 3 w. w.w.
C1, C4—25 uF. electrolytic.
C2—0.05 uF. tubular paper.
C3—0.02 uF. tubular paper.
T1—Centre tapped speaker transformer.
V1—6AU6.
V2—6AQ5.
M—Acos crystal microphone.




R1—300 ohm, 3 w. w.w.
C1—0.5 uF. tubular paper.
T1—Microphone transformer.
T2—Centre tapped speaker transformer.
M—Carbon insert.
V1—6AQ5.

output stage, the 6AQ5 being coupled to the Class C stage by a 1 : 1 auto-transformer. The 6AU6 pre-amplifier is coupled to a crystal microphone type Acos MIC 3 and with the values shown, a gain of 26 db—or a voltage ratio of approximately 200—is sufficient to swing the grid-cathode circuit of the 6AQ5 to a value which will give full output, that is approximately 4½ to 5 watts.

The second transmitter to be described was designed with mobile operation in view. It will be noted from Fig. 3 that the same valve line-up has been utilised, but certain circuit changes have been made. The 6AU6 is once again operated in the modified Pierce circuit, but an addition of the regeneration control condenser has been made. This was found to be necessary so that a greater output could be obtained from the crystal oscillator stage, as the final stage was to be operated as a frequency doubler in the 7 Mc. band. To obtain reliable operation with plate modulation, when utilising the p.a. stage under this condition, it is essential that the grid-cathode circuit of the p.a. stage be driven hard. The tank circuit of the 6AU6 is always tuned to the crystal frequency and the plate circuit of the 6AQ5 is arranged by switching so that the desired pre-tuned tank circuit can be selected.

When operating as a straight-through amplifier on 3.5 Mc., no neutralisation was found to be necessary. It might be mentioned that considerable thought was devoted to the lay-out with the view of eliminating neutralisation, and as mentioned previously when operated in the 7 Mc. band, the 6AQ5 is operated as a frequency doubler. A value of 3 Ma. grid drive is developed with the value of grid resistor shown in the circuit and an input of 40 Ma. at 250 volts is obtained on both frequencies and the efficiency of the output stage is quite high—50 to 60 per cent. A careful check of the transmitter used as a straight amplifier in the 7 Mc. band indicated that the small increase in the efficiency did not warrant the extra equipment necessary for straight through operation.

A careful note of the circuit arrangement of coils and tuning condensers for the two-band operation of the plate circuit of the 6AQ5 is worth-while, as a considerable saving in components was secured. The modulator (Fig. 4) used with this particular transmitter makes use of a 6AQ5 as the modulator. The circuitry is similar to the modulator previously described, but no pre-amplifier stage is utilised as the microphone, which is of the carbon insert type, is connected by way of the microphone transformer to the grid-cathode circuit of the 6AQ5. Ample grid drive or swing is possible with this type of circuit. It is worth while spending a little time in the selection of a suitable carbon insert as good inserts will give above average quality speech. Both transmitters described may be used for c.w. operation merely by the addition of a key and key-click filter in the cathode circuit of the 6AQ5.

## RECEIVERS

Two types of receivers have been developed, namely, one suitable for operation from a 6 volt source and one suitable for operation from a 1.4 volt, or dry cell, source. Fig. 5 shows a 5-valve circuit using 6.3 volt miniature valves. The circuit is straightforward, and it is not proposed to spend very much time on its description. The output from this particular circuit is fed to a speaker. If the use of headphones is found to be necessary, these may be shunted across the low impedance winding the output transformer or, if high impedance headphones are used, condenser-coupling may be made to the plate circuit of the 6AQ5.

The only other point worthy of note is the use of 455 Kc. intermediate frequency transformers. This was considered necessary so that some degree of selectivity could be obtained, particularly when operating in the 7 Mc. band.

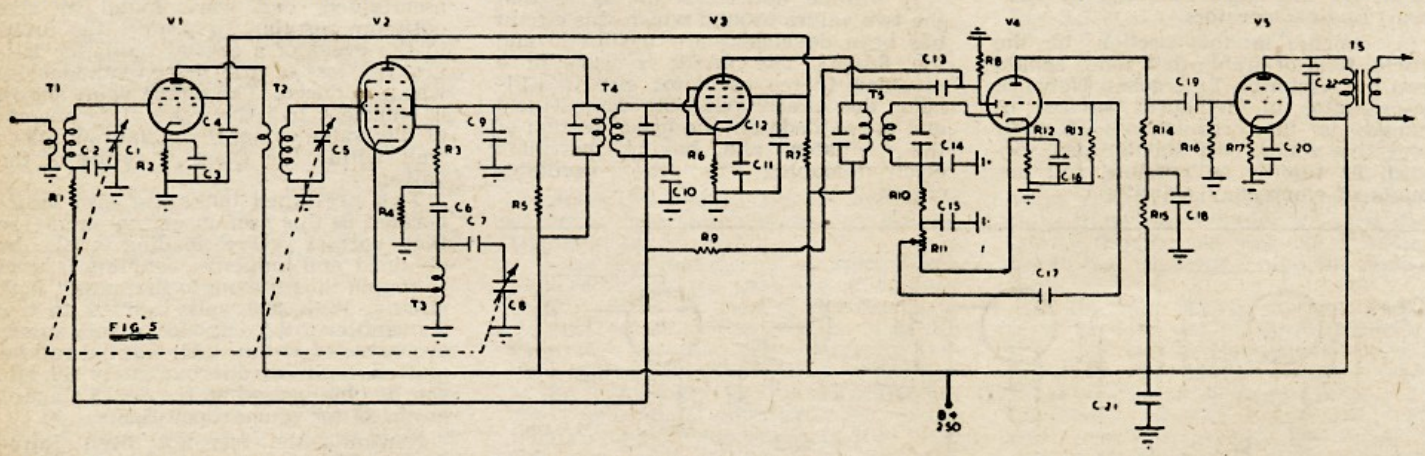
The second receiver is a battery operated receiver using miniature 1.4 volt series valves. This receiver is similar in all respects to the previous one described, but no speaker facilities have been included.

## AERIALS

Base and portable stations have a wide selection of aerials to choose from as, in most cases, they are not restricted to space. The use of half-wave antennae, or quarter-wave Marconi type antennae operated against ground are available, but with mobile operation, the antennae fall into a very closely defined field. It must be realised that the length of an aerial which a mobile station can use is limited to a maximum of approximately 12 feet. This antenna is electrically short compared to the frequencies used, and therefore must be a very inefficient radiator.

Various methods of improving the radiation efficiency of this type of antenna have been developed from time to time. All of these methods aim at operating the antenna as a quarter-wave section against the metal chassis of the car as the earth. Fig. 7 shows one method of bringing about this desired result. A loading coil of sufficient inductance is inserted at the base and tuned with the whip capacity to the desired frequency. The feed to the whip is made by way of coaxial cable from the transmitter aerial coil. Fig. 8 illustrates a whip antenna with the loading coil inserted at the centre, approximately. The coil is resonated with the whip capacity to the desired frequency. Fig. 9 shows the addition of top loading, at the same time utilising the centre loaded whip.

Various results have been claimed by experimenters for the three particular types of mobile antennae described. The base loaded antenna is recommended for the use of mobile stations, first, on account of the ease of making a sound mechanical unit and, secondly, sight must not be lost of the fact that mobile




C1, C5, C8—variable, three-gang.
C2, C3, C10, C11—0.05 uF. 200v. paper.
C4, C9, C12, C17, C19—0.05 uF. 600v. paper.
C6—50 pF. mica.
C7—Padder.
C13, C14, C15—100 pF. mica.
C16, C20—25 uF. electrolytic.
C18—0.1 uF. 600v. paper.
C21—8 uF. 600v. electrolytic.
C22—0.01 uF. mica.

R1, R15—100K ohm, ½ w. carbon.
R2, R6, R17—250 ohm, 1 w. carbon.
R3—50 ohm, ½ w. non-inductive carbon.
R4, R5—20K ohm, ½ w. carbon.
R7—40 K ohm, 2 w. carbon.
R8, R9, R13—1M ohm, ½ w. carbon.
R10—50K ohm, ½ w. carbon.
R11—500K ohm, volume control.
R12—5K ohm, 1 w. carbon.
R14—250K ohm, ½ w. carbon.
R16—500K ohm, ½ w. carbon.

T1—R.F. transformer.
T2—Mixer transformer.
T3—Oscillator coil.
T4, T5—455 Kc. I.F. transformers.
T6—Output transformer.
V1, V3—6BA6.
V2—6BE6.
V4—6AV6.
V5—6AQ5.

stations engaged in emergency operation are required to work to a base station or a mobile station in its zone, and **not** for State-wide communication.

The use of the centre-loaded whip and the capacity top-loaded whip, give superior results, but the mechanical construction that would have to be put into these types would not be justified by the extra radiation efficiency which would be obtained. The use of capacity top loading is not new, it has been used for years by broadcasting stations in an endeavour to increase the antenna current flowing in the vertical section of their antennae. This has been found to give stronger field-strength readings at a given point.

The same explanation can be applied to a less degree, to the centre loaded whip. The capacity of the top section of the whip to the chassis of the car increases the current flowing at the base of the antenna or the bottom half section of the whip, producing results similar to those for the capacity top loading. The use of coaxial cable between the transmitter-receiver and the base of the antenna has been found to operate satisfactorily and to reduce the effects of car ignition to a minimum. It is recommended that the antenna system be mounted at the rear of the car, that is, in a position farthest away from the source of generation of ignition interference.

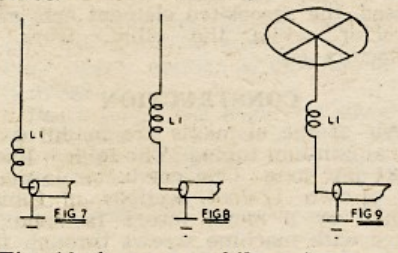
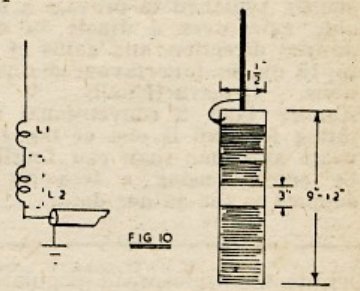



Fig. 10 shows a mobile antenna suitable for two-frequency operation. The loading coil or coils are made up on a single former with a spacing of approximately three inches between inner ends so as to reduce inductive coupling to a minimum. For the higher frequency or 7 Mc. operation, L2 is shorted out and the whip resonated by the adjustment of the inductance L1. For operation of the whip on the lower frequency of 3.5 Mc., the short-circuit is removed from the bottom coil L2, and its inductance adjusted to resonate the whip plus the inductance of L1 to the lower frequency. When this has been accomplished the changing from one band to the other can be achieved by merely shorting the bottom coil for high frequency operation, or unshorting the bottom coil—that is, making use of the two inductances L1 and L2 in series—for the 3.5 Mc. operation.




The reason for the low coefficient of coupling between L1 and L2 is to reduce the losses in L1 when L2 is short circuited, that is to keep the Q factor in L1 as high as possible.

No values of inductance have been given for the loading coils as the value is governed by the particular installation, that is, the length of whip, position mounted on vehicle, and the type of car (sedan, tourer or truck).



## FEDERAL EXECUTIVE PROCEEDINGS

**Resume of Minutes of Proceedings at Meetings of Federal Executive held during August-September, 1952**

**Federal Executive Vote at Federal Convention.**—After discussion of the contention by some Divisions that the Federal Executive—as the ex-officio executive of the Federal Council—should not have voting power at a Federal Convention, it was agreed that the time was opportune to obtain the decision of the Federal Council on this matter. Resolved therefore that Federal Council vote on the following motion:—

"That the right of the Federal Executive to vote in Convention be deleted from the Federal Constitution always provided that all members of the Federal Executive be ex-officio members of the Federal Council."

**Remington Rand "Television Interference" Booklet.**—Secretary reported that as at date of meeting in August seventy-five applications had been received from members for the free booklet "Television Interference," being shipped to the W.I.A. from Remington Rand Inc., Buffalo, U.S.A.

Resolved that copies to spare at time of receipt of shipment be forwarded to Divisions for free distribution to members.

**W.A.C. (America) Certificate Issuance.**—Secretary reported that W.A.C. (America) Certificates had been received for VKs 3PV, 3ATN, 3APV, 3JI, 3AHH and 7RX. Agreed that these be forwarded direct to the applicants in accordance with the agreement of Item 1 of General Business of the 1952 Federal Convention.

**Release of 160 Metre Band for Emergency Work.**—Secretary reported receipt of approval from the Director-General Postmaster-General's Department, of allocation as from September 1 of the band 1840-1860 Kc. to the Australian Amateur Service for use by its emergency organisations. Types A1 and A3 emissions, and d.c. plate input powers of up to 100 watts are authorised for use within the band concerned.

**Novice and Technician Licenses to be considered by Director-General.**—Consideration was given to a letter received from the Postmaster-General's Department, Wireless Branch, in reply to the W.I.A's. application for approval for issuance of Novice and Technician Licenses. Department advised that since reference to other administrations and departments would be necessary, inquiries were likely to be protracted. Resolved that W.I.A. give every possible assistance to the Department in easing any administrative obstacles.

**Re-Allocation of Amateur Call Signs.**—Resolved that a letter of complaint from Tasmanian Division with reference to the re-allocation of the call sign of a recently deceased VK7 Amateur be forwarded to the Department in support of W.I.A's. application for the adoption of a new method in re-allocating VK call signs.

**Proposed New Appointment to Office of Federal Treasurer.**—Secretary reported that Ced. Ewin, VK3AGC, had signified his willingness to undertake duties of this office when present Treasurer, George Manning, VK3XJ, vacated. This may not be for some time.

# The QH (Quick Heading) Beam Antenna*

## A Stationary "Rotary" Array for 14 Megacycles

**● Here is a stationary beam antenna for 14 Mc. whose parasitic elements can be simply and instantly switched to provide a sizable gain over a dipole in any desired direction, and gains of up to 10 db. in four favoured directions. Constructionally, it is simpler than a conventional rotating job and is one of the few beam antennae than can feasibly be erected using a tree as its support as the author does.**

Despite the widespread popularity of the horizontal rotating beam for 20 mx DX, the many mechanical problems involved are not often easily nor inexpensively solved. For the past several months, a non-rotating beam of the parasitic type has been in use at W1PKW with highly satisfactory results.

The general plan is shown in Fig. 1. It consists of a vertical half-wave folded dipole surrounded by four parasitic elements. Each of the parasitic elements can be tuned, from the operating position, so that it will act as either a reflector or a director. Thus any one of several directional patterns, as shown in Fig. 2, can be obtained, depending on the reflector-director combination selected by simply flipping four toggle switches.

A system of this type has several advantages. Perhaps the foremost of these is that directivity can be changed instantly without waiting for the rotator to turn. Furthermore, the pattern can just as readily be made essentially non-directional, when desired, for CQ-ing or general listening. Since no rotator is involved, the cost of the array is little more than the cost of the elements. Less space is needed—the over-all spread is only about 19 feet compared with the 33 feet or so needed for the horizontal beam—and the element supporting structure need not be as heavy or complicated, since vertical elements withstand wind and icing much more readily.

A feature that many will find of more than ordinary interest is the fact that it is one of the few types of beams that can be mounted in a tree. The branches in this case can serve as a convenient means of getting at the elements for assembly and adjustment.

A stationary beam of this type can usually be adjusted to compensate for the detuning effects of large objects in its field. This, of course, is not possible with an array whose position in relation to such objects is variable.

### METHOD OF TUNING

To allow for tuning adjustments, the parasitic elements are cut slightly shorter than the appropriate length for a director. In each element, a tuning stub is added at the centre to bring the electrical length up to that of a reflector. When the element is to be used as a director, the tuning stub is shorted out with a relay switched from the operating position. Thus the control system consists merely of the four relays, and a s.p.s.t. toggle for each. With one switch closed, the associated element acts as a director while the others work as reflectors, etc.

### CONSTRUCTION

All of the elements are made of ½" i.d. aluminium tubing. The folded dipole is 34 feet long. One conductor is made up of two 17-foot sections of tubing joined by a metal insert fastened in place with machine screws through the tubing and insert. The other conductor is similar, except that each section is cut 2" shorter to accommodate a 4" insulator at the centre where the folded doublet is fed. This insulator can be a 6" length of ¾" or 1" nylon, bakelite or polystyrene rod, turned down for an inch at each end to fit inside the aluminium tubing. The two conductors are connected together at the ends with galvanised iron straps that space them about 5", centre to centre.

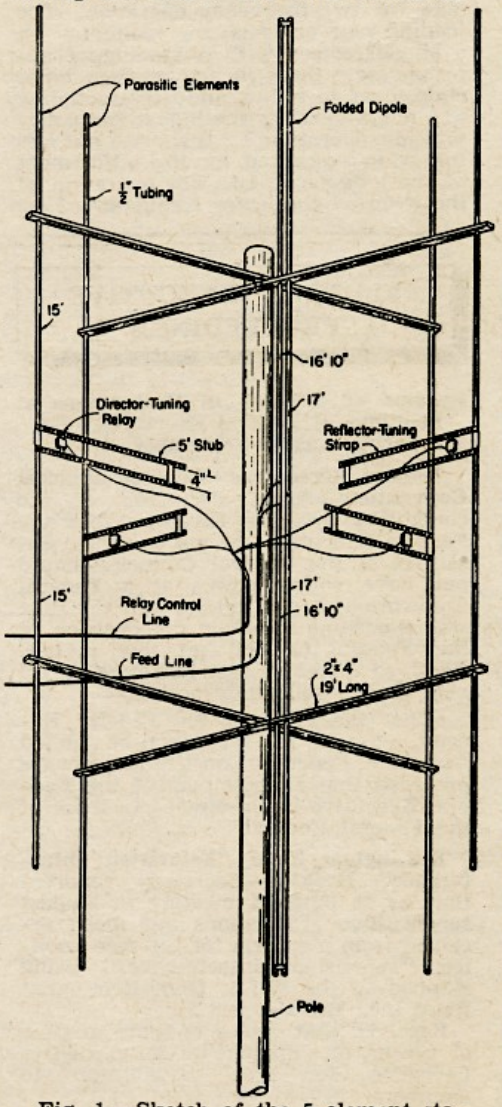



Fig. 1.—Sketch of the 5-element stationary "rotary" beam antenna. Each of the four parasitic elements can be tuned as a director or as a reflector by the remotely-controlled relays at the centre, thereby altering the radiation pattern as desired.

Each parasitic element is made up of two 15-foot sections of tubing joined by an insulator similar to the one used in the radiator. The tuning stubs are made of 5-foot lengths of 1/16" x 1" perforated galvanised iron strap. The perforations provide an easy means of adjusting the positions of the shorting bars and relays. The relays should be provided with weatherproof housings fitted with heavy metal tabs connected to the contact terminals and drilled to match the holes in the tuning stubs.

The framework carrying the elements consists of two pairs of 19-foot 2 x 3's or 2 x 4's, the pairs spaced about 15 feet on the pole or other support. The two pieces in each pair are fastened to the support at right angles and the pieces are bored near the ends to pass the aluminium tubing which is fastened in place with bolts or metal pins. (This gives a spacing of about 0.12 wavelength.) One piece of each pair is bored also near the centre for the folded dipole. Better insulation has not been found necessary, but, if desired, the crosspieces can be bored with large clearance holes and the elements insulated from the crosspieces with pieces of sheet insulation drilled to fit the tubing snugly.

If the crosspieces have a tendency to sag, this can be corrected with suitable guy wires or diagonal braces. If the antenna is mounted in a tree, as mine is, the branches may serve as additional support. If a tree is not used, the support should be of wood. When fastening the crosspieces to the support, they should be orientated so that the lobes of Fig. 2A are in the most desired directions.

At present I am feeding the folded dipole with RG-8/U coaxial cable, but plan to change over to a balanced line using RG-22/U or RG-57/U. If coaxial cable is used, it would be better to use a balun or bazooka connection. The relay-control wires should be brought to the supporting structure and formed into a cable, which together with the transmission line, should be run at right angles to the elements to avoid distortion of the beam patterns. If necessary, the tuning stubs can be steadied by guying them to the pole with rope.

### ADJUSTMENT

In adjusting for operation in the 20 mx phone band, for example, the antenna should first be fed at 14.3 Mc. Each of the parasitic elements, in turn, should be tuned as a director by adjusting the position of the relay (closed), while the other three elements are en-

* From "QST," June, 1952.

tirely open. The adjustment in each case can be checked by maximum reading on a field strength meter located several wavelengths from the antenna. Readings should be taken, of course, in the direction of the expected lobe. Then, with the transmitter operating at 14.2 Mc., the reflector shorting bar is adjusted on each element, one at a time, with all relays open and the tuning stubs of all other elements open. This adjustment should likewise be checked with a field strength meter in the proper direction. Staggering the two sets of adjustments at frequencies either side of a centre frequency helps to broaden the frequency response of the system.

### RESULTS

In the six months that this antenna has been in operation, more South African stations have been worked than in the previous 20 years, and excellent reports are received from all continents. With three reflectors and a director, the front-to-back ratio is really good. It is very interesting to hear a VE8 coming in strong then switch to south and hear an LU or a PY working on the same frequency.

Using surplus cable and relays, the total cost of my "beam in a tree" was less than $25.00. Is it surprising that I am enthusiastic? Try one and you'll never use a rotating array again.

## TECHNICAL ARTICLES

**The Technical Editor reports that the technical articles' bag is very nearly empty, so how about it chaps?**

**Don't forget the beginners have to be catered for, so articles on beginners' equipment are also welcome.**

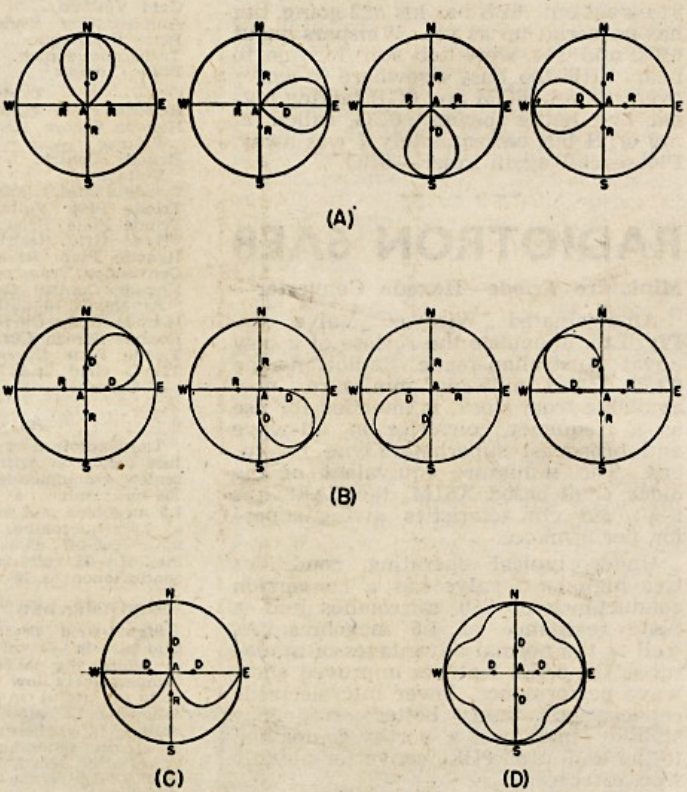



Fig. 2.—Approximate directional patterns obtainable with the stationary directional beam antenna.

A—With one parasitic element working as a director and the other three as reflectors, radiation patterns in any of four different directions may be obtained. Maximum gain is about 10 db.

B—With two parasitic elements acting as reflectors and the other two as directors, four new directional patterns are obtained. The maximum gain here is about 6 db.

C—Broader patterns are obtainable by using three directors and one reflector.

D—An essentially non-directional pattern with a gain of about 4 db is obtained when all four parasitic elements are tuned as directors.

# Awards and Certificates

**Compiled by Ray Jones, VK3RJ, Federal QSL Manager**

One or two errors crept into the list as published on page 10 of the July issue of "Amateur Radio." For the Empire DX Certificate, read the following: Proof of contact with 50 Empire call areas on 14 Mc. and with 50 Empire call areas on bands other than 14 Mc. One Certificate only.

Sweden, read title of award as W.A.S.M.

Canal Zone, read title of award as C.Z.A.R.A., and omit portion relating to an award for 10 contacts, until confirmation obtained.

### ADDITIONAL LIST OF AWARDS

Argentine, T.P.A.: Proof of contact with 21 American (North and South) Countries (includes Canada). Apply R.C.A.

Argentine, T.P.G.: Proof of contact with the 26 provinces of Argentine. Apply R.C.A.

Ecudaor, W.H.C.: Proof of contact with eight districts of Ecuador. Apply G.R.C.

Colombia, W.HK1: Proof of contact with 10 HK1 stations. Apply HK1DZ.

Belgium, W.X.B.A.S.: Proof of contact with 10 Brussells stations. Apply U.B.A.

Belgium, W.A.B.P.: Proof of contact with all Belgian Provinces. Apply R.B.

Panama, W.R.P.: Proof of 20 contacts with stations in Republic of Panama.

A further list will be published shortly when up-to-date particulars of the following awards have been obtained: A.A.A. (Worked All Africa), W.A.VE. (Worked all VE Districts), W.P.R.25 (Worked Puerto Rico), C.A. (LU100) 100 confirmed LU contacts, HB22 (Worked all Switzerland), W.A.CX. (Worked all Uruguay), W.A.YV. (Worked all Venezuela).

In order to celebrate its Silver Anniversary (1927-1952) the R.E.P. (Portugal) has instituted a new award called D.P.C.I. The rules call for confirmations proving 50 contacts with 13 districts of Portugal and the Azores and Madeira Islands. One contact at least must be had with each of the 13 districts and may be c.w. or phone or both. Contacts must be subsequent to 1st January, 1952. A special award will be made to the first Amateur in each country who obtains the award. A list of the districts can be obtained from this Bureau and applications for the award, which is free, can also be sent to me.

Another Portuguese award is the Diploma Do Mundo Portugues D.M.P. which in English means Worked Portuguese World. The rules of this award demand proof of contact, since July, 1947, with 10 Portuguese possessions. The ten are Portugal, Azores, Madeira, Cape Verde, Portuguese Guinea or St. Tome and Principe Islands, Angola, Mozambique, Portuguese India, Macau, and Portuguese Timor. The award is for c.w. or phone or both, and applications with cards must be sent DIRECT to the R.E.P. Travessa Nova, De S. Domingos 34-1, Lisbon, Portugal. No charge is made and the R.E.P. will bear the cost of returning the cards and the award. Listeners possessing the necessary confirmations are also eligible for the award.

# FIFTY MEGACYCLES AND ABOVE

Compiled by J. K. RIDGWAY, VK3CR.

### VICTORIAN DIVISION V.H.F. GROUP

The All Models Exhibition proved a success, and a description of the v.h.f. equipment used at the W.I.A. stand may be of interest. The transmitter which worked so reliably was built by Don 3XA, being of relay rack construction with separate r.f. sections for 6 and 2 metres. The line up on 6 mx is a 6J6 overtone crystal osc. and dblr., 832 bfr., p.p. 25Ts p.a., 100w. input. On 2 mx a similar line up is used with an additional 6J6 as a p.p. trebler to drive the 832 buffer on 144 Mc., and the p.a. p.p. 24Gs. The common modulator consists of p.p. 830Bs.

For reception, complete 6 and 2 mx receivers, built by 3HK and 3TO respectively, were used. Each Rx employed broadband r.f. amplification, crystal controlled h.f. osc. and tunable i.f. stage.

The two aerials, each a single bay turnstile, made by 3ABA, were mounted on the Exhibition roof about 100 ft. high, 270 ft. of co-axial feeder was required for each, due to the roof layout.

Many contacts were made on both bands; those made with mobile, walkie talkie and portable stations providing particular interest. Some of the nearer country stations were contacted and reports received from others.

A demonstration of the beaming effect of a directive antenna was shown in a working exhibit constructed by 3AUX. It consisted of a 580 Mc. Tx connected to a rotatable four element beam. At a distance of roughly 10 ft. a field strength meter gave a visual indication of relative field strength.

Other equipment on display included 6 mx mobile gear, field strength meters, receivers, etc. The work of country v.h.f. members was represented by a portable 6 and 2 mx Tx from 3UI, and a 2 mx trough line converter from 3GM.

At the August meeting of the Group some portable gear was on display. The first was a Tx from 3UI. This was the job which Alan used for his 144 Mc. contact from Mt. Major, near Dookie, to VK2PN near Kyandra, N.S.W., approximately 150 miles, during the last field day season.

Herb and Bob, 3JO/3OJ described the various units which they had used during their field day activities. This included the 955 osc. which ran an input of 1½ watts. Operating during one field day from Ben Cairn with this Tx, a contact over a distance of 90 miles was made.—3ABA.

### WESTERN AUSTRALIA

**50 Mc.:** Country contacts from Perth have been very patchy with quite severe QSB. 6FC, 6DW and 6BS come in still. Alan 6MO brought down a very neat converter using a 6J6 mixer. Roy 6RK has his beam up a little higher. 6IG and 6JW have been on a few times. John 6GU threatening to get going on 50. Lou 6LU still on band despite threat of leaving. Jack 6GB bobbed up recently. Don 6HK has a new modulator and his pair of 834s on again. We have heard Tom 6OY's voice and Tom 6TR's voice from 6FC's. What about hearing them from their own stations?

I went down to Bunbury and Donnybrook over the week-end. Saw Colin 6XI and worked Ted 6JG cross band 50 and 7 Mc. Also saw Arthur 6AL and tried to get him back on the air! Called on Jack 6AV at Donnybrook. While at Bunbury, on 24th August, I heard 6HK 4 x 7 for over two hours. I did not contact Perth because they were not looking for a signal from the south! Better luck next time! I was using my EL91, EL91, 6M5 portable rig modulated with another 6M5.

**144 Mc.:** Wally 6AG went portable to Rottnest and put through a good signal. Also worked 6BD who was apparently at Wally's QTH. Have only heard a few on this band as my Rx was U.S. for a while. 6RU, 6KW and 6GM active on the band. 6FC was off for a while, his 815 went out. 6BS has his 522 going, but has no aerial up as yet. Whispers about 6RK and 144 were too soft for me to hear. 6HK too busy elsewhere to worry over 144 yet. 6GM and 6GB talking bigger and better beams. 6BG called at my QTH but unfortunately I was away. Please call again Peter.—6BO.

— . . . —

# RADIOTRON 6AE8

**Miniature Triode—Hexode Converter—**

Amalgamated Wireless Valve Co. Pty. Ltd. announce the release of a new noval Australian-made Radiotron—the 6AE8. This nine-pin miniature, now available from stock, is intended for use as a frequency converter in all-wave and broadcast superheterodyne receivers. The miniature equivalent of the older octal-based X61M, the 6AE8 has improved characteristics giving superior performance.

Under typical operating conditions this high gain valve has a conversion conductance of 750 micromhos and a plate resistance of 1.5 megohms. As well as the normal advantages of miniatures, the 6AE8 features improved short wave performance, lower interelectrode capacitances and better frequency stability, making it a worthy companion to the Radiotron 6BE6 converter already well established.

### GENERAL DATA

**Electrical:**

| | |
|---|---|
| Heater, for unipotential cathode: | |
| Voltage (a.c. or d.c.) | 6.3 volts |
| Current | 0.3 amp. |
| Direct Interelectrode Capacitances (with no external shield): | |
| Hexode grid No. 1 to all other electrodes (r.f. input) | 4.5 pF. |
| Hexode plate to all other electrodes (mixer output) | 6.2 pF. |
| Triode grid and hexode grid No. 3 to all other electrodes (osc. input) | 5.3 pF. |
| Hexode grid No. 1 to hexode plate (max.) | 0.05 pF. |
| Hexode grid No. 1 to triode grid and hexode grid No. 3 (max.) | 0.25 pF. |
| Triode plate to all other electrodes (triode grid earthed) | 1.7 pF. |
| Hexode grid No. 1 to triode plate | 0.07 pF. |
| Triode grid and hexode grid No. 3 to triode plate | 1.8 pF. |

**Mechanical:**

| | |
|---|---|
| Mounting position | Any |
| Maximum overall length | 2-3/16" |
| Maximum seated height | 1-15/16" |
| Maximum diameter | 7/8" |
| Bulb | T-6-½ |
| Base | Small Button Noval 9-Pin |

Pin 1—Grid Nos. 2 and 4.
Pin 2—Grid No. 1.
Pin 3—Cathode.
Pin 4—Heater.
Pin 5—Heater.
Pin 6—Plate.
Pin 7—Grid No. 3 and Triode Grid.
Pin 8—Triode Plate.
Pin 9—Internal Connection.

### CONVERTER SERVICE

**Maximum Ratings: Design-Centre Values**

| | |
|---|---|
| Hexode— | |
| Plate Voltage | 300 max. volts |
| Plate Dissipation | 1.5 max. watts |
| Screen (Grids 2 and 4) Supply Voltage | 300 max. volts |
| Screen (Grids 2 and 4) Voltage | 125 max. volts |
| Screen (Grids 2 and 4) Dissipation | 0.4 max. watts |
| Control Grid (Grid 1) Positive Voltage | 0 max. volts |
| Cathode Current | 10 max. Ma. |
| Peak Heater-Cathode Voltage, plus or minus | 90 max. volts |
| Triode— | |
| Plate Voltage | 175 max. volts |
| Plate Dissipation | 1 max. watts |
| Cathode Current | 6 max. Ma. |

**Triode Characteristics:**

| | |
|---|---|
| Plate Voltage | 100 volts |
| Grid Voltage | 0 volts |
| Amplification Factor | 22 |
| Plate Resistance | 7800 ohms |
| Transconductance | 2800 umhos |
| Plate Current | 10 Ma. |

**Typical Operation:**

| | |
|---|---|
| Hexode Plate Voltage | 250 volts |
| Hexode Screen (Grids 2 and 4) Voltage | 85 volts |
| Hexode Control Grid (Grid 1) Voltage | —2 volts |
| Triode Plate Supply Voltage | 250 volts |
| Triode Plate Voltage | 115 volts |
| Triode Plate Dropping Resistor | 30 kilohms |
| Triode Grid Resistor | 30 kilohms |
| Hexode Plate Resistance | 1.5 megohms |
| Conversion Transconductance | 750 umhos |
| Hexode Control Grid Bias for Sc equals 10 umhos | —25 volts |
| Hexode Plate Current | 3.5 Ma. |
| Hexode Screen Current | 3.2 Ma. |
| Triode Plate Current | 4.5 Ma. |
| Triode Grid and Hexode Grid 3 Current | 300 Ua. |

### APPLICATION

The Radiotron type 6AE8 is a nine-pin miniature converter with a conversion conductance, under recommended operating conditions, of 750 micromhos, a hexode plate resistance of 1.5 megohms and an oscillator transconductance of 2,800 micromhos. The signal grid has a remote cut-off characteristic, and a signal-grid bias of —25 volts reduces the conversion transconductance to 10 micromhos.

#### RECOMMENDED OPERATING CONDITIONS

**Signal-Grid Bias.** The recommended signal grid bias is —2 volts and is the minimum bias at which the 6AE8 should be operated. The comparatively low cut-off bias voltage of —25 volts is useful in avoiding overloading of a following i.f. amplifier when a common a.v.c. voltage is applied to the two valves. It also assists in reducing playthrough in reflex receivers by restricting the i.f. signal applied to the grid of the reflexed amplifier on strong stations.

**Screen Voltage.** Although a screen voltage of 85 is recommended for the 6AE8, this figure is not critical provided that the screen dissipation is not exceeded.

The screens of the converter and i.f. amplifier in a typical receiver are usually operated from a common source, and when a.v.c. voltage is applied to the two grids the screen voltage will rise. This may decrease the plate resistance of the converter and thus alter the coupling, and reduce the selectivity, of the converter plate circuit i.f. transformer. This effect occurs only on stations of sufficient strength to operate the a.v.c. system; where it is undersirable it can be eliminated by stabilising the screen voltage by the use of a suitable voltage divider. In the case of the 6AE8, provided that the screen voltage does not rise above 140 volts due to normal a.v.c. action, the plate resistance of the valve should not fall below 1 megohm, for plate voltages between 180 and 250 volts.

**Oscillator Grid Resistor.** The comparatively low value of oscillator grid resistor, 30,000 ohms, specified for the 6AE8 greatly reduces the possibility of squegging occurring at the high frequency end of the 6-18 Mc. short wave band, so that a grid stopper is not normally required.

(Continued on Page 9)

# All Models Exhibition, Melbourne, 1952

The All Models Exhibition was held from Saturday, 30th August, to Saturday, 6th September, at the Exhibition Building, and proved to be most popular with the public. Official attendance was 92,000, which was 20,000 more than the previous time the Exhibition was held—three years ago.

The Victorian Division of the Wireless Institute appointed Mr. Len Moncur, VK3LN, to organise the stand, which was located on the stage, probably the best position in the Exhibition.

Three large screens about 12 feet high and stretching across the 90 ft. stage were hung with a dark cloth upon which QSL cards from all countries were displayed, at suitable intervals attractive black and white signs were printed giving the countries which each group of cards represented. Across the full width of the stage, above the cards, in large letters were placed the words, "World Wide Communication by Amateur Radio."

Behind the screens and hung in front of the organ loft, was a large dark backdrop, to form a suitable background for the names of each country, each sign having tinsel streamers hanging from it.

At the top of the screens were located five miniature beams, turning in unison. The overall effect from the body of the hall was most striking.

Amateur equipment on display included transmitters operating on all bands from 2 to 80 metres, and it was possible for the public to see and hear at close quarters just how an Amateur Station is operated.

Antennae used for this equipment included beams for v.h.f. and 20 metres and half-wave dipoles for 40 and 80 metres. Due to the strong broadcast harmonics on 80 and 40 metres in the city area a v.h.f. link was installed to VK3JD in Albert Park. During the period of the Exhibition over 500 contacts were made.

Apart from the transmitters actually operating, quite a number of transmitters, field strength meters and similar gear were on display, including the small emergency portable transmitter described by VK3LS in this issue of the magazine.

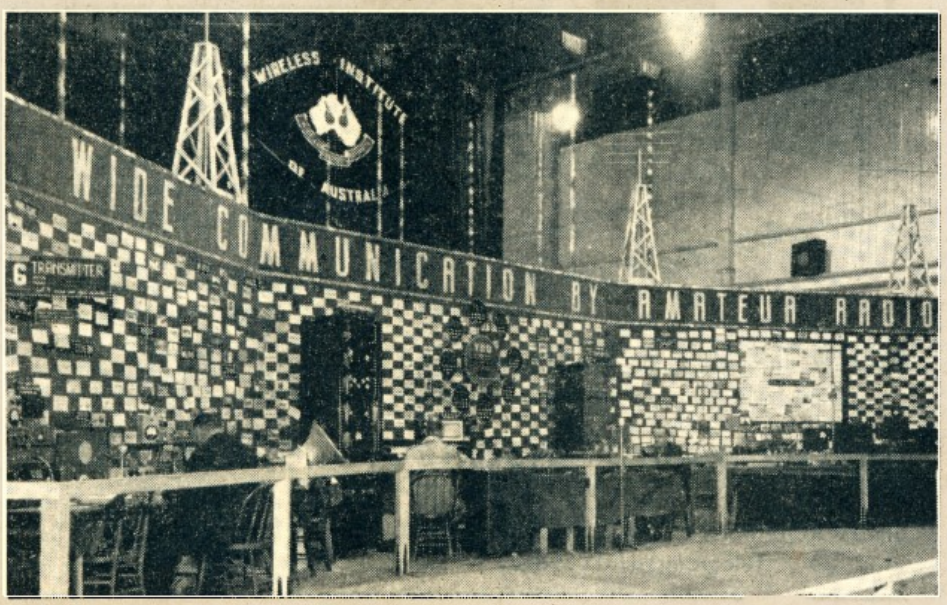
One of the most popular sections, particularly with the small visitors, was the novelty section! A Geiger counter which gave off the characteristic noise when a sample of uranium was brought near it; a miniature four-element beam driven by a v.h.f. transmitter, with a half-wave dipole and indicating meter at the other end of the table, which was used to demonstrate the principle of the beam; a ping-pong ball floating on a column of air, when an attempt is made to reach for the ball the air is cut off and the ball drops back (many small boys went home tired out after fighting this teaser); an electronic key was also operating in this section, together with a light which cut on and off when an invisible beam of infa-red light was cut. Small boys monopolised the novelty section as was anticipated.

On one front corner of the stage a tape recorder drew quite a crowd as people crowded around to record their voices, some of the girls present even sang a song.

One of the main exhibits was a television transmitter and receiver built by Len Moncur, VK3LN. This equipment used an iconoscope and electronic scanning of 130 lines, 25 frames. With the aid of two photo floods and a frame to keep the visitors in focus, thousands of children were televised to be viewed by their proud parents at the other end of the exhibit. One girl complained she couldn't see how she looked, so was advised that if she rushed round quickly she might see herself! She tried at least three times before she woke up to the fact Len was pulling her leg.

The Moorabbin Radio Club and the Railways Institute also displayed some of their members' equipment, and throughout the whole exhibit simple transmitting and receiving equipment was on display to encourage the beginner who may be awed by the elaborate set-ups.

All in all, it is safe to say that Amateur Radio received some excellent publicity, as without doubt, almost all of the 90,000 who attended saw the exhibit by the W.I.A.

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## RADIOTRON 6AE8

(Continued from Page 8)

**Oscillator Grid Current.** Under typical conditions of operation, optimum performance will be obtained with an oscillator grid current of 300 Ua. in the 30,000 ohm grid resistor. If the grid current is allowed to fall appreciably below this figure, loss of conversion gain will result. The range between 300 and 400 Ua. will provide the best compromise of sensitivity, noise and spurious responses in most cases, although somewhat higher figures can be used.

**Oscillator Signal Grid Coupling.** On the short wave band the oscillator should be operated on the high frequency side of the signal and, particularly when a low value of signal grid bias is used, care should be taken to see that coupling between signal grid and oscillator grid circuits is not great enough to cause signal grid current to flow at the high frequency end of the band due to the presence of oscillator voltage on the signal grid. If, with a particular layout, the oscillator voltage cannot be reduced to a sufficiently low value, then neutralising may be required, though this is not normally the case.

It should be noted that it is not necessary to reduce the oscillator voltage on the control grid to zero because a small amount of correctly-phased oscillator voltage will increase the conversion transconductance of the valve.

**Grid Versus Plate Tuning.** Plate tuning of the oscillator gives better frequency stability on the short wave band than grid-circuit tuning, but due to the greater amplitude of oscillator voltage developed in the oscillator plate circuit, it may make unnecessarily difficult the reduction of oscillator voltage in the signal circuit to a satisfactory level, even on the broadcast band. Accordingly, grid-circuit tuning of the oscillator is recommended unless an unusual degree of oscillator-frequency stability is required. With either plate or grid-circuit tuning of the oscillator, better frequency stability is obtained with high values of oscillator grid current.

# AMATEUR CALL SIGNS

## FOR MONTH OF JULY, 1952

### ADDITIONS

VK—

**New South Wales**

2SU—C. B. Jones, Lot 5, Hutchinson Street, Redhead, via Newcastle.
2ABJ—B. W. Proudlock, "Guyong Court," 72 Edward Street, Bondi.
2AMA—M. G. Burleigh, c/o. Nymboida Power Station, via South Grafton.
2AOJ—L. C. Parr-Smith, 76 Ferry Av., Kogarah.
2ARB—R. D. Smith, Flat 1, 7 Merton St., Stanmore.

**Victoria**

3SQ—A. E. Robinson, c/o. Department Civil Aviation, Aerodrome, Mildura.
3AJU—W. D. Guild, Block 257, Red Cliffs.
3ALF—L. R. Fowler, 11 Evan St., Parkdale, S.12.
3AOD—A. G. Earwicker, 17 Thoresby Rd., Newborough, North Yallourn.
3ATF—R. T. Forster, 57 Robinson St., Moonee Ponds, W.4.
3ATK—H. M. Meallin, 63 Waratah St., South Oakleigh, S.E.13.
3AZD—W. Dempsey, 568 Pascoe Vale Rd., Pascoe Vale, W.8.

**South Australia**

5LF—R. J. Sanders, 2 Olive Av., Westbourne Park.

**Western Australia**

6NP—G. S. Bemrose, 221 Broome St., Cottesloe.

**Tasmania**

7MC—W. R. Attwood, Waddamana.
7WN—W. R. Ion, House 285, Bronte Park.

### ADDITIONS

VK—

**New South Wales**

2FJ—2a Hamilton Avenue, Naremburn.
2VR—195 Hope Street, Bathurst.
2YB—383 Oxford Street, Paddington.
2ABX—Cr. Lake Rd. and Margaret St., Warner's Bay.
2ADH—5 Richardson St., Old Bar, via Taree.
2AMW—45 Rosemont St., West Wollongong.
2APH—12 Pearl Avenue, Epping.

**Victoria**

3GK—170 Martin St., Garden Vale.
3LY—76 Cunningham Street, Sale.
3PY—64 Bournian Avenue, Strathmore.
3RR—18 O'Connor Street, Horsham.
3XQ—6 Goldsmith Avenue, Preston, N.18.
3YE—7 New Street, Surrey Hills, E.10.
3AJI—8 Victoria Avenue, Elsternwick.

**Queensland**

4VH—38 Grimes Street, Yeronga.
4RJ—Methodist Parsonage, 54 Peary St., Northgate, Brisbane.

**Western Australia**

6SR—537 Charles Street, North Perth.
6ZX—Cody Street, Northam.

### DELETIONS

**N.S.W.:** VKs 2DD, 2MC (now operating under VK7MC), 2NF, 2AJY.

**Victoria:** VKs 3PD, 3UW (now operating under VK6NP), 3VS, 3AJK.

**South Australia:** VK5SU.

**Western Australia:** VK6ON.

**Tasmania:** VKs 7MA (now operating under VK2AMA), 7WD (now operating under VK3AZD).

**Territories:** VK1NL.

## FOR MONTH OF AUGUST, 1952

### ADDITIONS

VK—

**New South Wales**

2ACA—Canberra Radio Club, Station: Hut No. 3 Riverside, Barton, Canberra. Postal: Canberra Radio Club, P.O. Box 59, Kingston, A.C.T.
2APU—D. H. Collins, 18 Sharland Av., Chatswood.
2APW—E. G. Baker, 41 Tramway St., Mascot, Sydney.

**Victoria**

3UR—R. R. Anderson, 42 Smythe St., Benalla.
3AFB—W. C. Caldwell (Cpl.), c/o. Chief Signals Officer, Southern Com., Melbourne.
3AIB—A. I. Berry, Hazelwood Rd., East Warburton. Postal: 11 Goldthorns Av., Kew, E.4.
3AID—F. C. Hutton, 62 Wellington St., West Footscray.
3ASH—R. R. Elkin, Bay View Rd., Grand View Estate, North Geelong.
3AUD—A. V. Dwan, Portable throughout Australia. Postal Address: 52 May Rd., Toorak.

**Queensland**

4WL—W. Robertson, 16 Alcock St., Coopers Plains, Brisbane.

**South Australia**

5JN—J. M. Brammer, 30 Clifton St., Goodwood.
5PD—J. H. P. Boucaut, 5 Newak Rd., Torrens Park.

**Tasmania**

7FC—F. C. Harland, Station: 12 Wellesley St., South Hobart. Postal: 25 Wentworth St., South Hobart.
7MR—D. M. Richardson, 6 Cooper St., Burnie.
7RE—R. A. Emmerton, 19 Strahan St., North Hobart.

### ALTERATIONS

VK—

**New South Wales**

2CE—109 Murriverie Road, North Bondi.
2FW—39 Collins Street, Annandale.
2MZ—"Killara," Great West. Highway, Lawson.
2QO—32 Laycock Street, Bexley North.
2RT—11 Seaforth Avenue, Cronulla.
2VQ—16 Beach Street, Balgowlah.
2YM—2 Henderson Street, Eastwood.
2YS—Cabramatta Hostel, Cabramatta.
2AAP—19 Salvia Avenue, Bankstown.
2AEJ—Wellington Street, Baradine.
2AFH—11 Patterson Street, Ermington.
2AHX—15 Pinnacle Street, Miranda.
2AHY—19 Market Street, Wollongong.
2ASC—23 Caoma Av., Nth. Brighton, Sydney.
2AVM—Flat 2, 9 Hipwood Street, Kirribilli.

**Victoria**

3EY—C/o. R. Dickison, 278 Buckley Street, Essendon.
3GT—C/o. Department Civil Aviation Aerodrome, Mallacoota.
3TY—37 Lansdown Street, Sale.
3ZR—46 Simmons Street, South Yarra.
3AJJ—15 Kitchener Street, Deepdene, E.8.
3AOL—Laura Avenue, Belmont, Geelong.
3ARA—30 Reynolds Parade, South Pascoe Vale.

**Queensland**

4FT—Purnell Street, Zillmere.
4GD—"Kiosk," Cape Pallarenda, c/o. G.P.O., Townsville.
4IN—53 Stuckey Street, Clayfield, Brisbane.

**South Australia**

5DA—C/o. Station 5CK, Crystal Brook.
5ED—2 Shannon Street, Blair Athol.
5GP—Allotment No. 1127, Victualling Yard, Darwin. Postal: C/o. P.M.G. 5DR, Darwin, N.T.
5LG—64 Weroona Avenue, Parkholme.
5NV—20 Fashoda Street, Hyde Park.
5RZ—32 Inverness Avenue, St. Georges.
5VK—2 Gregg Terrace, Millicent.

**Western Australia**

6LA—189 Lockhart Street, Canning Bridge.
6WD—25 Lockyer Avenue, Northam.

**Tasmania**

7DA—42 Barry Street, Glenorchy.
7DB—6 Amy Road, Penquite, Launceston.
7EJ—177 Tarleton Street, East Devonport.
7XW—64 Lawrence Vale Road, Launceston.

### DELETIONS

**New South Wales:** VKs 2DP, 2XC, 2ALY.

**Victoria:** VKs 3OQ, 3OS, 3QX, 3WB, 3ALN, 3AVD (now operating under VK3AUD).

**Queensland:** VK4KG.

**South Australia:** VKs 5MG (now operating under VK3AFB), 5SU.

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## WHERE IS THAT RESISTOR?

How often is the junk box raked over for a resistor of some particular value or, if there is some order in the shack, how many times is a cascade of assorted resistors poured out on the bench and the resulting heap explored at length?

The problem has been solved here by a simple filing system using flat 50 cigarette tins and a few dabs of paint. Seven tins are used and the ends are painted respectively black, brown, red, orange, yellow, green and blue. Resistors are stored under the colour representing their multiplier (R.M.A. Colour Code), i.e., the colour of the third band or the dot.

When a resistor of a particular value is required, the tin of the appropriate colour is selected, e.g., red—thousands of ohms, or yellow—hundreds of thousands of ohms. The wanted resistor usually presents itself without further ado—or the nearest approximation is immediately available.

A similar filing system can be used for capacitors. It is remarkable how many items can be stored in this rather attractive, gaily-coloured stack of tins. —Robert H. Black, M.D., VK2QZ, 36 College St., Sydney, N.S.W.

# VK-ZL DX CONTEST, 1952

N.Z.A.R.T. and W.I.A., the National Amateur organisations in New Zealand and Australia, invite world-wide participation in this year's VK-ZL DX Contest.

**Objects:** For the world to contact VK and ZL stations and vice versa.

**When:** CW—24 hours from 1200 GMT Saturday, 4th October, to 1200 GMT Sunday, 5th October. PHONE—24 hours from 1200 GMT Saturday, 11th October, to 1200 GMT Sunday, 12th October.

**Note:** Duration for all contestants is 24 hours.

**RULES**

1. There shall be three main sections to the Contest—(a) Transmitting C.w.; (b) Transmitting Phone; (c) Receiving, Phone and C.w.

2. The Contest is open to all licensed Amateur transmitting stations in any part of the world. No prior entry need be made. Mobile Marine or other non-land based stations are not **permitted** to enter the Contest.

3. All Amateur frequency bands may be used, but no cross-band operation is permitted.

4. C.w. will be used for the first week-end and phone for the second week-end. Stations entering for both phone and c.w. sections must submit entirely separate logs for each.

5. Only one contact per band is permitted with any one station for contest purposes.

6. Only one licensed Amateur is permitted to operate any one station under the owner's call sign. Should two or more operators operate any particular station, each will be considered a competitor and must submit a separate log under his own call sign.

7. **Cyphers:** Before points may be claimed for a contact, serial numbers must be exchanged and acknowledged. The serial number of 5 or 6 figures will be made up of the RS (telephony) or RST (c.w.) reports plus three figures which may begin with any number between 001 and 100 for the first contact and which will increase in value by one for each successive contact, e.g., if the number chosen for the first contact is 053, then for the second contact the number must be 054, for the third 055 and so on. If any contestant reaches 999, he will start again with 001.

8. **Scoring: For VK and ZL Stations ONLY**—Fifteen points will be scored for the first contact on a specific band with any overseas country; fourteen points will be scored for the second contact on the same band with the same country; thirteen points for the third and so on to the fifteenth contact which will score one point. All contacts with that particular country on that band will thereafter count one point each. This scoring procedure will be repeated on each band to encourage multiband operation. There will be no VK-ZL contacts between each other. Official A.R.R.L. countries list will be used. **Note:** Points will not be entered in the log for each contact—totals for each country will be shown in the summary. **Each CALL AREA in the U.S.A. will be a "country" for scoring purposes.**

**Overseas Scoring:** One point will be scored for each contact on a specific band with any VK-ZL district. The final score will be derived by multiplying the total contacts on all bands by the total number of VK-ZL districts worked on all bands. VK-ZL districts are: ZL—1, 2, 3, 4; VK—1, 2, 3, 4, 5, 6, 7, 9.

9. **Logs:** (a) Logs must show in this order: date, time in GMT, band of operation, call of station worked, serial number sent, serial number received.

(b) A separate log must be submitted for each band. For each band an analysis sheet must be given showing: list of countries worked with numbers of contacts for each country and points claimed for each country worked, and total points for that band.

(c) A summary sheet to show 1, station call sign; 2, name and address of the operator; 3, phone or c.w.; 4, list of points claimed for each band; 5, grand total of points; 6, brief description of equipment used during the Contest—transmitter, power, antennae, etc.

(d) A declaration that all Contest rules and regulations for Amateur Radio in your country have been observed and that the log is correct and true to the best of your belief.

10. The right is reserved to disqualify any entrant who during the Contest has not observed regulations or who has consistently departed from the accepted code of operating ethics.

11. The ruling of the Executive Council of N.Z.A.R.T. will be final in the event of any dispute.

12. **Awards:** N.Z.A.R.T. will award attractive certificates to the top scorer on each band and the top scorer in each VK and ZL district. Awards of trophies will be announced independently by W.I.A. and N.Z.A.R.T. Additional certificates will be awarded depending upon the number of logs received.

13. Entries from VK and ZL stations should be posted to N.Z.A.R.T. Contest Manager, 86 Lytton Road, Gisborne, N.Z., to arrive no later than 31st December, 1952.

**Receiving Section**

1. The rules for the receiving section are the same as for the transmitting section, but it is open to all members of any shortwave listeners' society in the world. No transmitting station is permitted to enter for the receiving section.

2. The Contest times and logging of stations once on each band per week-end are as for the transmitting section. Logs will take the same form as the transmitting section.

3. To count for points, the call sign of the station being called, the strength and tone of the calling station, together with the serial numbers sent by the calling station must be entered in the log. Scoring will be on the same basis as for transmitting stations.

4. It is not sufficient to log a station CQ.

5. VK receiving stations may log overseas stations and ZL stations, while ZL receiving stations may log overseas stations and VK stations.

6. Certificates will be awarded to the highest scorers in each country. Extra certificates may be issued depending upon the number of entries received.

**AN AID FOR COMPUTING SCORE**

| No. of Contacts | Pts. | No. of Contacts | Pts. |
|---|---|---|---|
| 1 | 15 | 11 | 110 |
| 2 | 29 | 12 | 114 |
| 3 | 42 | 13 | 117 |
| 4 | 54 | 14 | 119 |
| 5 | 65 | 15 | 120 |
| 6 | 75 | 16 | 121 |
| 7 | 84 | 17 | 122 |
| 8 | 92 | 18 | 123 |
| 9 | 99 | 19 | 124 |
| 10 | 105 | 20 | 125 |

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# "CQ'S" WORLD WIDE DX CONTEST

A precis of the important rules are as follows:

1. **Contest Period:** Phone Sections—0200 GMT October 25 to 0200 GMT October 27. C.W. Sections: 0200 GMT November 1 to 0200 GMT November 3.

2. **Bands:** The Contest activity will be in the 3.5, 7, 14, 21 and 27/28 Mc. Amateur bands.

3. **Competition** will be divided into four sections: (1) One operator phone section, (2) Multiple operator phone section, (3) One operator c.w. section, (4) Multiple operator c.w. section. Stations in both phone sections may contact each other, and stations in both c.w. sections may contact each other, but no contacts between phone and c.w. stations will be allowed.

5. **Serial Numbers:** C.w. stations will exchange serial numbers consisting of five numerals, the first three being the RST report, and the last two being their own zone number. Stations in Zones 1 through 9 will prefix their zone number with zero (01, 02, 03, etc.). Phone stations will exchange serial numbers consisting of four numerals. The first two being the readability and strength report, and the last two being their own zone number. Phone stations in zones 1 through 9 will prefix their zone number with a zero (01, 02, 03, etc.).

6. **Contacts:** Contacts between Amateur stations on different continents shall count 3 points; contacts between Amateur stations on the same continent, but not in the same country, shall count 1 point; contacts between stations in the same country, for the purpose of obtaining zone and/or country multipliers, shall be permitted, but no points will be allowed for these contacts. More than one contact between stations on each band will not be permitted.

7. **Multipliers:** Two types of multipliers will be used: (1) a multiplier of 1 for each zone contacted on each band, (2) a multiplier of 1 for each country worked on each band.

9. **Scoring:** The contest score for each single band is the sum of the zone and country multipliers of each band, multiplied by the contact points of that band. The total all band score is the sum of the zone and country multipliers of all bands, multiplied by the total of contact points on all bands.

All logs must be postmarked no later than December 15, 1952. **Send logs direct to: Herb Becker, W6QD, DX Contest Committee, 1140 Crenshaw Blvd., Los Angeles 19, Calif.**

# DX NOTES BY VK4QL*

These will be the last DX notes you will read from the pen of VK4QL, not because of my "threat" of last month, although very little help has again been received, but by the time you read these notes, VK4QL will have signed for the last time, and maybe signing VK2QL once more. In the meantime, until things are sorted out and I find whether circumstances permit the necessary time, Ray VK7RK has consented to carry on. Ray will probably not have the time to be able to watch the bands as I have been able to up here, nor will I in VK2, so please do the right thing by Ray and let him have some material. Ray's address is 5 Galvin Street, Launceston.

The band survey is as follows:—

**3.5 Mc.: 2GW** was heard one morning trying hard to raise something, but do not know how he fared. Some very strong Interstate signals were heard during the R.D. Contest. **3FH** said he can usually hear one or more Ws on here at night. **4QL** heard YO6VG but he seemed interested in Russian satellite countries only.

**7 Mc.:** This band is packing up again in the mornings for Europe, but I still can't raise them, whereas southern stations can. **4QL**'s best catch, much to 7RK's dismay was ZD4AB in Ray's hoodoo zone. ZD4AB claims this is the first ZD4/VK QSO on 7 Mc. In the middle of the R.D. Contest, **2DG** worked YI2FD and HB9HM, the latter on phone, while I heard three ZS, working one. **3CP** lists GI6TK*, FP8AI* (0800z), CM3GC*, EA1DY (0700z). **4EL** has been playing round with aerials to work the Europeans he hears round 0500z, and found the answer in a vertical, working two LAs first try. **3FH** has been working them an hour later. **4QL** has reached 76 countries on this band, and latest listing, KB6AX*, G6BS 0640z, G8NF 0700z, CO2OK 0700z, YI3BZL, LZ2KAC, YV5FH, KP4CC*, ZS6AAC*, ZS5NM, ZD4AB*, ZC4RX, VQ2AT, LU6WH, YI2FD, CR9AF*, ZE2JS, and many Europeans. **7RK** does most of his listening at night on this band and other than the consistent KC6QY, nothing out of the ordinary is heard. Try getting out of bed early Ray. Our s.w.l. from VK3, Don Grantley, also hearing the Europeans well, the pickings being GD3FSS, GM5YB, HE5RE, UB5HK, UC2KAB, HZ1MY. **4XJ** worked KH6s, obtaining S8 on one phone transmission. The KH6 remarked that they are expecting permit for 7 Mc. phone shortly. Working FU8AC OK.

**14 Mc.:** This band has been erratic as usual, one State having an opening whilst the other a dead band. **2ASO** at 2100-2245z on 5th, found the band strange, very little noise and signals from Europe, G8s, DLs, OK, OE, F3, also K5FBN, KJ6AR, FQ8AG, ZP5RD, CN8GG. Then the noise came up and the signals disappeared. All he worked was DL9KR. **2HZ** works North America 1200-1400z, Bill tried to find VS5ELA but no luck. **4FJ** lists CR6BZ*, VP5BH*, Roy has scored 183 countries in Open and 162 in c.w. countries score, and is awaiting arrival of his D.U.F. Award. **3CP** managed to organise a two-way with EA6AM. **4EL** has found a few openings in the wee small hours, the time respectable people are in bed. **4QL** heard ZS2MI the one and only time, but the chase got too hot and burnt out his bias transformer. In the 2½ years at Townsville, a total of 181 countries were worked. Power 50w. and the old Windom. The latest listing is PJ2AD, PJ2CD, HB1JJ/HE*, ZS1H and ZS2MI 0800z, JY1JK, EA8BF*, C3MC*, VP9AW, TG9AC, HP1BR, EA3BF 0100z. The band is changing as the Europeans are again appearing in the afternoons and mornings. **7RK** still hoping for the conditions to improve lists HC2OS, I1ARK, VK1EM*, VK1RG*, PJ2AD, EA4CY, DL4EF*, HB9IX*, CT1JS, ZS1H. **2AMB** got amongst it on the opening of the 10th, having no trouble with quite a few countries. **9GW** chased M1D without result. **4XJ** finds the Ws are falling off. Lists DU6IV*, SM5CO*, DL1LD*, and KW6AZ.

**21 Mc.:** Not much in way of reports on this band. Either skip was wrong or not many tried the band in the R.D. Contest as I heard very few. **4QL** heard/worked KH6, W, VE, KZ5 a couple of openings, but towards the end of the month, **9GW** has been getting through to Europe nightly, even running a sked at 1000z. Geoff found, to his disappointment that he was not the first to QSO Europe on 21 Mc. **4XJ**, nothing other than VE7AIV and ZL.

**28 Mc.:** Nil sightings in most places, but **9GW** found very strong sigs from KH6 on 22nd. **4XJ** worked a couple of KH6 and heard one W. Is hoping for improvement next month.

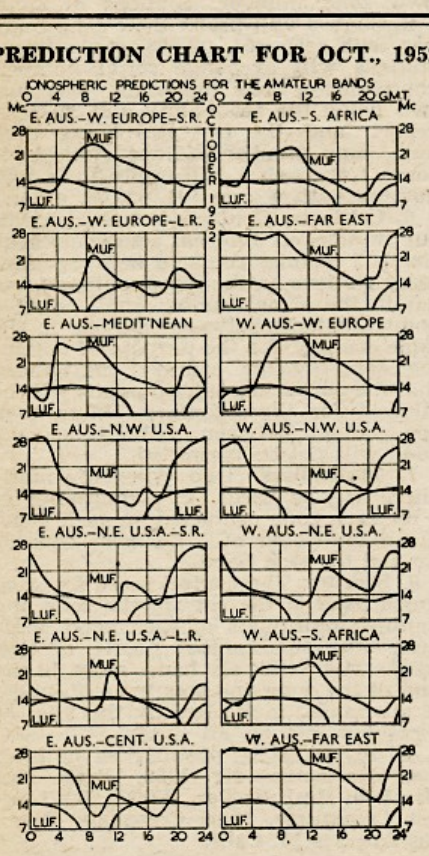
The QSL situation is not gladdening the DXer's heart these days either. **2AWU** has received his from G6GN in confirmation of 21 Mc. **3CP:** VR4AF, KG4AF, VP2MD, PJ1UF, KT1OC, YK1AH. **4FJ:** C9AM and KS6AA. **4QL:** FG7XA and VR4AF. **4XJ:** FU8AC, OE5ZZ, has received one from HP3FL for a 7 Mc. phone contact.

The gen section has little of interest, one reason being I have not heard Dick KV4AA. A recent "QST" said that VS2 is now a separate country from VS1. From W7JLU we learn that FP8AK, ZD8BH and HH2FL are active on 7 Mc. I heard ZD9AA being called one morn. 5MZ will be in VK3 for one week from October 10, and intends seeing some of the gang. Here is one for the propagation boys to work out: On 22nd at 0730z 9GW and 4QL were QSO on all bands except 27 Mc., from 3.5 to 28 Mc. in 13 mins., and except for 3.5, where it was S6, all reports were S7 or S8. 3YP has now also QRT and gone to VK4 to set up himself. He worked 215 countries and has 199 confirmed.

The thought for the month is for those who helped during the period I have been trying to make these notes of some interest, and for those who will help Ray carry on. "**Many thanks.**"

* Flt./Lt. F. T. Hine, No. 10 (G.R.) Squadron, R.A.A.F., Townsville, Queensland.

## PREDICTION CHART FOR OCT., 1952




## DX C.C. LISTING

### PHONE

| Call | No. | Ctr. | Call | No. | Ctr. |
|---|---|---|---|---|---|
| VK3BZ | 3 | 163 | VK4JP | 8 | 114 |
| VK3EE | 10 | 163 | VK3AWW | 14 | 112 |
| VK4HR | 12 | 160 | VK4DO | 20 | 109 |
| VK3JD | 1 | 155 | VK5MS | 24 | 109 |
| VK6RU | 2 | 152 | VK4RW | 23 | 104 |
| VK4KS | 9 | 152 | VK2ADT | 13 | 102 |
| VK6KW | 4 | 150 | VK2AHA | 15 | 102 |
| VK3LN | 11 | 141 | VK3HO | 25 | 102 |
| VK4FJ | 21 | 135 | VK6PJ | 19 | 101 |
| VK3JE | 7 | 133 | VK4RT | 22 | 101 |
| VK4WF | 16 | 130 | VK3IG | 5 | 100 |
| VK6DD | 6 | 126 | VK3GG | 18 | 100 |
| VK4WJ | 17 | 122 | | | |

### C.W.

| Call | No. | Ctr. | Call | No. | Ctr. |
|---|---|---|---|---|---|
| VK3BZ | 6 | 207 | VK4QL | 36 | 128 |
| VK4HR | 8 | 182 | VK4RF | 11 | 125 |
| VK3FH | 15 | 177 | VK3YD | 27 | 123 |
| VK4EL | 9 | 167 | VK3EK | 3 | 122 |
| VK2EO | 2 | 152 | VK3JI | 25 | 118 |
| VK3CN | 1 | 151 | VK3PL | 38 | 117 |
| VK2GW | 16 | 151 | VK3HT | 37 | 117 |
| VK3CX | 26 | 150 | VK3UM | 12 | 116 |
| VK6SA | 28 | 150 | VK3YL | 39 | 115 |
| VK4FJ | 29 | 150 | VK7LJ | 24 | 114 |
| VK3VW | 4 | 143 | VK4DA | 7 | 113 |
| VK2QL | 5 | 142 | VK7LZ | 17 | 112 |
| VK6RU | 18 | 141 | VK4RC | 13 | 107 |
| VK5RX | 23 | 140 | VK6KW | 40 | 104 |
| VK3KB | 10 | 138 | VK2YC | 34 | 103 |
| VK5FH | 31 | 134 | VK3APA | 14 | 101 |
| VK5BO | 33 | 133 | VK3NC | 19 | 101 |
| VK4DO | 20 | 129 | VK2OA | 32 | 101 |
| VK3JE | 21 | 129 | VK7RK | 22 | 100 |
| VK3XK | 30 | 128 | VK2AEZ | 35 | 100 |

### OPEN

| Call | No. | Ctr. | Call | No. | Ctr. |
|---|---|---|---|---|---|
| VK3BZ | 4 | 220 | VK3VQ | 46 | 116 |
| VK4HR | 7 | 206 | VK3AWW | 45 | 115 |
| VK2NS | 16 | 195 | VK3JA | 43 | 114 |
| VK3JE | 12 | 190 | VK2ADT | 14 | 113 |
| VK6RU | 8 | 186 | VK4RW | 52 | 113 |
| VK4FJ | 32 | 173 | VK3PG | 47 | 111 |
| VK3HG | 3 | 171 | VK3MM | 49 | 111 |
| VK6KW | 13 | 171 | VK4RC | 21 | 110 |
| VK2DI | 2 | 170 | VK3ZB | 34 | 110 |
| VK3KX | 1 | 167 | VK3HO | 38 | 110 |
| VK4EL | 10 | 167 | VK2ZC | 25 | 108 |
| VK4KS | 24 | 167 | VK2YL | 11 | 106 |
| VK4DO | 15 | 157 | VK3AWN | 36 | 105 |
| VK3LN | 29 | 144 | VK2VN | 18 | 104 |
| VK5FL | 26 | 143 | VK4UL | 27 | 104 |
| VK3MC | 5 | 139 | VK6PJ | 44 | 104 |
| VK3OP | 19 | 137 | VK6PW | 50 | 104 |
| VK4WF | 40 | 137 | VK2HZ | 17 | 103 |
| VK6DD | 22 | 136 | VK7KB | 30 | 103 |
| VK3HT | 41 | 135 | VK2TI | 37 | 103 |
| VK2ADE | 28 | 133 | VK6DX | 42 | 103 |
| VK9GW | 48 | 133 | VK7RK | 31 | 102 |
| VK2AHA | 9 | 128 | VK4TY | 35 | 102 |
| VK2AHM | 20 | 125 | VK5HI | 51 | 101 |
| VK3JI | 33 | 119 | VK2ACX | 6 | 100 |
| VK7LZ | 23 | 116 | VK2TG | 39 | 100 |

# FEDERAL, QSL, and DIVISIONAL NOTES

## FEDERAL

### CHANGE OF FEDERAL TRAFFIC MANAGER

John Tutton, VK3ZC, who has been Federal Traffic Manager since 1946, has left Australia for a sojourn of six months or so in England. He hopes to join the staff of the London Assurance Co.—the parent Company of the organisation in which John has been employed in Australia.

We all wish John bon voyage, and trust that his working holiday in U.K. will be all he hopes for himself. He carries with him the good wishes of all his associates in the W.I.A. —particularly the boys who worked the schedules with him during six years operation on the traffic network—and the sincere thanks of all members of the Executive for his unparalleled devotion to the duties pertaining to his office.

The vacancy in the Federal ranks has been filled by Doug Paine, VK3FH, and a cordial welcome is extended to him. We feel safe in assuring Doug that the same co-operation from the operators in the State stations of the traffic network will be available to him as has been available to his predecessor.

### 21 Mc. BAND

Reported in the R.S.G.B. Bulletin for July is the release of part of the 21 Mc. band to U.K. Amateurs effective from 1st July. At the date of publication, c.w. transmission only was permitted although negotiations are afoot to obtain permission for phone operation.

During the first two days on the new band, W2, VQ4, and KP4 stations were worked by Gs whilst 11 stations were heard and logged.

Activity on this band in Australia has not been very good due to conditions, but expectations are running high for some really good DX during the coming summer months.

### VICTORIAN DIVISION EXHIBITION

From 30th August to 6th September the Victorian Division of the W.I.A., in affiliation with the Australian Association of Models Societies, staffed an Amateur Radio stand at the 4th All Models Exhibition at the Exhibition Buildings, Melbourne.

An attendance of 10,000 people on the opening night and attendances exceeding this number on other afternoons and evenings during the week of the Exhibition, was an indication of the intense interest the public have for spare time hobbies.

Great credit is due to Secretary Russell Bradshaw, VK3SX, and Len Moncur, VK3LN, Exhibition Committee Chairman, and their team of hard-working assistants for the undeniably excellent decoration and operation of the W.I.A. Amateur Radio exhibit.

Although the problem of a high noise level was difficult to overcome on the high frequency bands, transmitters were maintained in operation on 80, 40 and 20 metre bands throughout the Exhibition, and hundreds of good contacts were made for the benefit of the milling public seeking to hear and see what was going on. Many overseas contacts were made despite the difficult reception conditions.

Excellent transmission and reception was maintained on the 2 and 6 metre bands. Mobile stations as far out as the Dandenong Ranges assisted to show the public the great advances made in the v.h.f. portion of the frequency spectrum.

A closed circuit 130 line television hook-up installed and demonstrated by Len Moncur, VK3LN, together with many exhibits of Amateur transmitting, receiving, testing, and electronic equipment, completed an exhibition that should have done much towards recruiting many exuberant juniors to membership in the W.I.A. and the Amateur ranks. Pictures elsewhere in this issue will no doubt be of interest to the readers of "Amateur Radio."

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## FEDERAL QSL BUREAU

### RAY JONES, VK3RJ, MANAGER

Still no claimant for the card from HZ1TA addressed to VK3AW, and no applicant for the QSL from VU2BC addressed VK3P. Doesn't anyone read these notes?

Bill Storer, VK1BS, now VK2EG, advises that he has completed and mailed all QSLs. Anyone not receiving theirs by end of October please let Bill know.

### W.I.A. ACTIVITIES CALENDAR

**October 4-5: VK-ZL DX Contest (all bands), C.W. Section.**

**October 11-12: VK-ZL DX Contest (all bands), Phone Section.**

**October 25-27: "CQ's" World Wide DX Contest, Phone Sections.**

**November 1-3: "CQ's" World Wide DX Contest, C.W. Sections.**

**December 6-7: European DX Contest (all bands), C.W. Section.**

**December 13-14: European DX Contest (all bands), Phone Section.**

Brief details of the forthcoming CQ World-Wide DX Contest scheduled 0200 GMT, 25th October, to 0200 GMT, 27th October for Phone Sections, and 0200 GMT, 1st November, to 0200 GMT, 3rd November, for C.W. Sections, shows the Contest to be divided into four Sections, namely, (1) One operator Phone Section, (2) Multi-operator Phone Section, (3) One Operator C.W. Section, (4) Multi-operator C.W. Section.

Eric Trebilcock, B.E.R.S.195, with his usual interesting budget of titbits, writes, "Have now 209 QSLs from 222 countries heard, latest being FB8XX (Kerguelen Is.) . . . I've heard that ex-VK1YG (Heard Is.) has sent some QSLs to French Hams, I didn't share in the handout despite two stamped envelopes . . . The present operator of FB8ZZ is Joseph Klein who may be relieved early next year by the 1949 operator Louis Felard . . . The well known FB8XX operator, Lt. Mohe, is now back in France, but the name of the present operator of that station is not known . . . As far as is known no FB8AX (Adelie Land) QSLs have ever been sent out. One of the operators (Gros) did not return to France but went to New Caledonia . . . A bundle of QSLs from FB8XX and FB8ZZ have left France for Australia . . . Heard ZS2MI of Marion Island via long path at 0700z at low edge 14 Mc. c.w. He was badly QRM'ed by our R.D. Contest sigs . . . ZL2MY, a lad of 70 summers, seeks VK contacts on 7 Mc., the elderly gent is on daily . . . Europeans are to be heard on 3.5 Mc. around sunrise at week-ends."

A small publication that should prove of great use and interest to DX hounds is the "Time Zones of the World," compiled and published by Mr. C. G. Costello, 115 Hobart St., Miramar, Wellington, E.4, N.Z. The book, which measures 8 x 5 inches, contains more than 300 country listings, six pages of maps, universal time indicator. It is obtainable for the sum of two shillings and ninepence (N.Z. currency) post free, from the publisher.

Ron Mould, VK9FM, of Madang, T.N.G., finally got the rig perking from that location, but after a few minutes of use, heavy misfortune overtook him. Firstly the bias pack for the final gave out, then the minor h.t. tranny blew and a new 829B went west. In addition the power pack tray looked as if it had been struck by lightning. Ron has sent south for replacing parts and in the meantime has constructed a smaller rig using 6V6, 6V6, 807. Ron and XYL Gina are eagerly looking forward to February, 1953, that being the month of their departure south. During middle of August they were favoured by a visit from Doug Beadel, VK9DB, who blew in to perform some installation work.

SM5ARP is looking for VK contacts on 3.5 Mc. in an endeavour to complete his W.A.C. on that band. He is operating between 2000-2100 GMT daily particularly during the month of October, and is using 3550 Kc.

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## NEW SOUTH WALES

The August general meeting of the N.S.W. Division was held at Science House on the 22nd with the President, Mr. John Moyle, occuping the chair. After the minutes were disposed of, the visitors were welcomed and the correspondence read. The President gave his usual round-up of the month's activities and of coming events. By the way, don't forget that Annual Field Day which is again to be held at Woy Woy where such a good time was had by all last year. **It will take place on Sunday, 16th November.**

The ionospheric predictions for the R.D. Contest came in for some discussion and all agreed that they were accurate and most useful. Contrary to current policy, the meeting was thrown open to general business before the lecture instead of after. The inevitable result was that an interminable argument developed about Division finances and the position of the official organ "Amateur Radio" in the scheme of things. This argument led nowhere and resulted in an interesting lecture by the President being slightly hurried in order to make time for a discussion and demonstration afterwards. To those many who follow the latest developments in audio amplification, the lecture on that subject delivered in John Moyle's faultless style was most interesting and informative and as usual the lecturer had all the answers to the questions which came up in the discussion. We died-in-the-wool old key-bashers (a dwindling race?) will have to get down to tintacks with some phone soon or get left behind altogether. The discussion was followed by a most instructive and pleasant demonstration of radio and pick-up amplification, all visually monitored on a c.r.o. The lecturer had the Hon. Secretary's assistance in bringing a whole van load of gear for the demonstration and there were many who would have liked to hear a great deal more of it.

The meeting concluded at 11 p.m. when we were ushered out by the caretaker.

### WESTERN SUBURBS

2KS gets along with his share of DX and if heard denotes that there is an opening to some place. 2AGT has further improved his signal and gets among it also. 2APT will move into a new QTH at the end of the year, about 20 yards away. 2NJ now has the ironmongery for atop the tower and will be rotating it soon. 2XH still busy, has got well into the building programme. 2AGX has nice signal. 2AIA been very ill, is rapidly recuperating. 2AMJ still wrapped up in getting good response from that mike, no need to worry Joyce, we all recognise the voice. 2LJ heard quite a lot of late. 2ARF on 144 mostly, seems very quiet these days so something must be brewing. 2AGG also in the same boat, but says he will be on the lower frequency bands in the near future.

Burwood Radio Club is a virile institution, more members are showing up and there is plenty of activity for all. Meets each Tuesday night at Greenwood Hall, Liverpool, Enfield. Buses pass the door and all are welcome, come down and have a look see.

2QC has not been too well of late, hope to see you around soon Jess. 2AWU heard on most bands, works most on the air that is at all possible, very fine effort. 2AAB playing around with his modulator. 2AHU again threatens to become active, heard this afternoon for the first time for months. 2AMP had a go during the R.D. Contest, and did quite nicely as did many more from this area. 2ACD

## A.O.C.P. CLASS

The Victorian Division A.O.C.P. Class will commence on Thursday, 30th October, 1952. Morse and Regulations are held on Monday and Theory on Thursday evenings from 8 to 10 p.m. Persons desirous of being enrolled should communicate with the Secretary W.I.A., Victorian Division, 191 Queen Street, Melbourne (Phone FJ 6997 from 10 a.m. to 4 p.m.), or the Class Manager on either of the above evenings.

working on the de-hydrated beam, getting results with it as well, but experiments are not as yet finalised.

### SOUTH WESTERN ZONE

Don 2RS active on 40, also Jack 2OY. Stewart 2PL still trying to get fellows at Griffiths interested in Ham Radio. Roy 2DO heard putting in a solid signal during the R.D. Contest. Gordon 2OW also heard on 40. Ron 2RH can be heard "earbashing" nearly every evening on 80, the two main sufferers being 2DY and 2AJO. Have not heard 2APZ about, what's the trouble Ray OM?

2AJO now has a three element 20 mx beam working OK; no DX yet, but hoping; also getting gear together for 50 Mc. with four element beam and using 807s in final. Not much news this month, but we hope to have more for next if the fellows in the zone come up for a "ragchew" on 80 at 7.30 p.m. on Sunday evenings.—2AJO.

### HUNTER BRANCH

Once again serious floods have hit the Hunter Valley. Maitland "copped it" twice within a week, and our Emergency Net was ready for action, but fortunately the main communication lines held. The following were "teed up" in various sections of Maitland: 2XQ, 2DG, 2AKP (with his Bedside Special), and 2ANL. Scheds were kept on 80 mx. In Newcastle, Jim 2ZC did some liaison work between Hunter boys, 2AHH at Kempsey (where position bad also) and Police Wireless and R.I. Fred 2AGY and Norm 2AQS did good job on duty at Police Wireless Station, while Lou 2TO took Police Van with Emergency Tx through swirling water to isolated township of Morpeth. Associate Mac O'Brien's farm at Miller's Forest was in worst of flood but we hope Mac OK again now.

It was most disappointing to our hard working committee when only a handful of our members turned up to hear Mr. J. F. Anderson, of the A.W.V. Co., lecture on "Transmitting Valve Ratings," at the August meeting. Your committee went to considerable trouble to arrange this interesting lecture and it is up to you chaps to support them. The I.R.E. joined us for the night and provided an excellent supper which was very much appreciated.

At a special meeting called to consider the matter, it was decided to accept the offer of the Tech. College to provide radio equipment and room to house same, thus enabling the Branch to run its own station. A Technical Committee comprising 2OT, 2XT and 2AHA was elected with power to co-opt. These chaps have big job of converting TA12 Tx, RA10 Rx, SCR522, etc., so buck in and help them fellows. Our President has donated a Tx power supply and our Treasurer has loaned a mike and modulator. This is a great start, and our Management Committee is arranging a roster of Licensed Hams and other details in preparation for opening of station. So, hand your name in right away, don't leave it to the other fellow. Help our Branch, help Ham Radio, and help the other chap get his ticket.

Lionel 2CS just had holiday in Riverina district. 2XT kindly kept 2WI scheds while yours truly flew north for brother's wedding. 2SF did very well in first effort, got amongst the VK6s. 2DZ used his Rothman Modulator to advantage. Harold 2AHA right among top scores and did well on 21 Mc. Norm 2ANA thought one VK6 was hard to get on with!!

Lew 2WU getting S9 reports from Ws on 20 c.w. 2AMM was unable to get gear re-erected in time for R.D. Contest. Lakesider 2AAM pleased with Rothman Modulator he has built. Bill 2WP has the TA12C perking on 80, 40, and 20 mx c.w. using single wire matched impedance antenna. Tom 2PQ finds his Rx just as good with one i.f. stage! Old timer 2KQ active again and Jack operating from new shack. Had cross lake QSO with 2AFA, Harry been playing with modulator.

2CN also active again; has built gear into steel rack with common v.f.o. and modulator and separate finals. Ken 2KG keeps weekly 40 mx scheds with VK4s. A new 40 mx f.d. giving 2MR excellent results. Shorty 2NX will probably build Rothman Modulator—when time available! An all-band antenna is planned by Phil 2ANG. George 2AGD has completed his tape recorder. Ron 2AAI used miniature Tx while holidaying at Wangi. It was modelled on Bill 2AXM's "Pip Squeak." Ernie 2FP did some brass pounding with the small rig he uses on 40!! As his h.t. tranny "cooked up," Neil 2XY now using 500 aside job which gives him nearly 50 watts. Doug 2ADS does well with ZLs on 40, also works locals on 144. Bill 2PJ using new v.f.o. and working ZLs on 80 mx c.w. 2ASJ grateful to those who have provided transport for him.

**Notice of Meeting.**—The October meeting will be held at Tech. College, Tighes Hill, on Friday, 10th. One item of business will be the election of committee to arrange Xmas Social.

### NORTH COAST AND TABLELANDS ZONE

Quite a lot of water has passed under and also over many bridges since last month and the North Coast had its share of excess water. Fortunately for us, we did not experience the distress which again visited Maitland, but the low lying farms over quite a large area around Kempsey were covered by as much as ten feet of water. In times of distress, such as the flooding of Kempsey and Maitland, it is very pleasing the way fellow Amateurs are ready and willing to help one another and your scribe wishes to take this opportunity of thanking those on the band who helped whilst the flood danger existed.

Crieff 2XO had a visit recently to Coff's Harbour on the occasion of the visit of Marjory Jackson. Congratulations to newly-weds, Ken 2APB and Audrey, and we do wish them all the happiness possible. Quite a few people are holidaying in this zone at present and am sure they will have an enjoyable time. Ron 2ASJ was at Murwhillumbah, whilst quite a few spent their time at Urunga. We sympathise with Alec 2ABU and his wife Jean who had the misfortune to overturn their car near Dorrigo and whilst they escaped serious injury, their lad sustained a broken leg.

Chas 2ADE has been heard pounding brass on 40 whilst Jack 2ADN is getting among the DX on 20 with a 70 ft. high double extended zepp. Harry 2ARY was on deck in case of floods. 2JK has added a son to his five daughters, our congratulations to you and your good wife Jack. Two metre activities look like starting up again shortly as 2AWG has beam and 2AHH a new stock of 7193s. Quite a few of the boys are warming up on 6 mx for the coming summer and it will be very interesting to try 2 mx once contact is established on 6. Results will be awaited with interest.

### COALFIELDS AND LAKES ZONE

News of the month—2PZ has hit the air again after a two years silence and has been on 7 Mc. phone and getting out nicely. Ken 2ANU still active on v.h.f. bands and has added 2AGY to his contacts on 144 Mc. Not much heard of 2VU this month, apparently Geoff is carrying on with his re-building programme. 2ADT on holidays, spent the first week in bed, so not

very active at the moment. 2YL not active on any band at present and contemplating dismantling some of the gear. No news of any activity from Kurri this month.

The southern gang seem to be more active, 2ARV very busy on 7 Mc. at week-ends. Major 2RU has built a rig for 21 Mc. and has already worked an odd spot of DX on that band. 2GA very pleased with new 144 Mc. gear and managed to hook 2NS. After prolonged efforts, 2KR finally managed a complete QSO with 2ADT on 144 Mc. A defunct 201A is to be exchanged in recognition of this effort.

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## VICTORIA

### NORTH-EASTERN ZONE

According to my information Henry 3HP did not make the Convention as he was being connected to the S.E.C. power lines, and Col 3WQ had that petrol tank trouble still. Associate Jim Harrington was taking a great interest in things; what about doing an A.O.C.P. Correspondence Course OM then things will be still more interesting and easier to follow.

Syd 3CI, Alan 3UI, Peter 3APF and Murray 3HZ are doing a little on 6 mx. Syd's XYL had the small daughter in a very attractive fancy dress costume at a local function one night recently. Ken 3KR has increased the height of his masts and installed a Lazy H antenna on 20 mx and was right in on Central American and European DX around 1600 hours at the end of August. Tom 3TS is brightening the happy home with a few concrete paths. Rex Anderson, of A.O.C.P. fame last month, is now VK3UR with 50 watts input, nice work OM. 3YV recorded and played back the transmissions on the August zone hook-up, very interesting. Vic 3ABX hopes to move down to Benalla shortly. Have found out only lately that 3ANG was formerly a VK6.

### EASTERN ZONE

Fairly quiet in the zone at present, except on Sunday nights when the boys leave the fireside arm chairs for the zone hook-up. 3SS revamping the shack, it now looks almost respectable. David Scott passed the theory OK in the last A.O.C.P., but code tripped him up. Alan Jacka, of Bairnsdale, was successful at the same exam. 3IZ's mate, John Batterick, goes for his ticket in the October exam. Good luck John! John tells me the c.r.o. reacted very well to 230 volts of a.c.!

The annual meeting of the Sale Sub-Branch was held at Stratford at the home of 3IO, 20 odd members attending, and a good time was had by all. On 18th and 19th October a field day will be held in the Orbost area, as a good try out for possible emergency work in the future, so look out for signals from the zone on those days.

3SS is revamping an AT5 for emergency work. 3SG preparing to put a full gallon on the air with a converted TA12. Better remove the rectifier from the b.c. set, Leo! 3ABP tells us that Ray Pulford, of the R.A.A.F., now owns the call sign of 3ARO. 3ANC now earning his daily bread and margarine at Warragul. Jeff 3AGF leaving for VK4. 3AMV missing. 3LV another regular on 80. Not very active myself, too cold at night, and having much modulator trouble—blown fuses and pre-amp. hum, just to mention a few reasons. Think I'll take up golf or something!

### GEELONG AMATEUR RADIO CLUB

During the month of August members were entertained with a film night given by Chris 3JR. This was held at the Gordon Institute of Technology. Two new members were welcomed to the club and another nominated for membership. Syllabus items were given by Ed 3AKE who brought along a 2 mx super regen. Rx. Members will build this type of equipment to use in the forthcoming field night to be held on the 144 Mc. band. It consisted of a single RL18 and uses a dipole antenna. 3AKE also brought his grid dip oscillator to the club and one of the members was able to get his Rx into the band.

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## QUEENSLAND

### NORTHERN DOINGS BY VK4EL

Harry 4KW on all bands during the R.D. Contest. John 4FH QRL, but found time for R.D. Contest. Alec 4MA last seen en route to Brisbane to attend Uni. there. Bill 4BQ still at it on 14 Mc. They tell me Harry 4ZP has discovered a copper mine, at any rate he now has 33 ft. of it standing vertically for a new all-band antenna, loads up beautifully, so look out DX! Edgar 4GF not been too well of late, but is on occasionally on 7 Mc. and is always good for a rag chew. Ted 4EJ still working on that launch of his, but says it won't be long now before he has a 7 Mc. signal permeating the ether telling the usual fishermen's tales! Alec 4JM, who also has an interest in the boat, is installing 50 Mc. equipment which he hopes to test out soon with Len 4GD and yours truly on that frequency.

Harry 4XH had his first 21 Mc. contact with the writer of these notes a few days ago, but says he prefers 14 Mc. Frank 4QL has "The Bomb" almost ready, this is a highly compact 8 x 8 x 10 in. mighty Tx that operates on 7, 14 and 21 Mc., with a single switch doing everything, sure has a kick out here at Clevedon! Not much heard of Bob 4RW lately, only heard in the Sunday morning hook-up of the W.I.A. Alan 4BE just finished one of the best 2 element beams the writer has ever seen, it is a masterpiece, and if it works only half as good as it looks, well I know where most of the DX cards that come to Townsville will go to; a mighty job Alan, congrats. Doug 4DB just gone to V.I.B. for a course of 6 months just as he was going to make a comeback on the air. Len 4GD coming on 50 Mc. again in the near future, don't be too long Len. Ted 4MH still getting his, or more than his share of the DX on 14 Mc., say what about coming on 7 Mc. Ted?

Roy 4AX still "spinning the platters," say what about cleaning the cobwebs out of the rig mate? Andy 4BW still pops up occasionally on 7 Mc. with a nice signal and it was the writer's pleasure to be in a three-way QSO with Andy and another old timer, Harry 4HK, the other day; both Andy and Harry had potent signals at this location. 4EL, gee whiz, it's my turn again, well I must confess that I have felt uneasy for months, why? Well, because I don't have a vertical antenna around the place, so the other day I put one up, a 33 ft. end fed Zepp, only 6 ft. off the ground, and the first CQ on 7 Mc. landed me a LA, which only goes to show you!

Would welcome a call from any of the gang up North from Mackay to Cairns on 7, 14, 21 or 28 Mc. to tell me of their goings on for this column.

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## SOUTH AUSTRALIA

It was my intention to open these paragraphs in some striking new manner as from this month, firstly to attract back to the fold some of my straying readers who are showing an inclination to read a certain scribe's notes from across the western border before mine, and secondly, to show a certain up and coming copy-boy from VK6 just how things should be written. However, my pálsy walsy, Tommy (the Editor to you), has assured me that I have nothing to fear from that direction because that scribe still writes his notes on a slate, and therefore postage costs prevents him ever being a menace to me in any direction.

The August meeting took the form of a "buy and sell" night, and quite a varied collection of gear was offered for sale, or as we are forced to say in VK5, offered for tender, that is if we want to stay within the law. The tender receivers (and a tougher two guys it would be hard to find) were Dougal 5BY and Ross 5LW, and the three clerical looking gentlemen seated at the head of the table handling the money and the receipts were Dave 5DH, Jim 5FO, and Hal 5AW. Everybody seemed to thoroughly enjoy themselves, and when you consider that the last member left the clubrooms at eleven forty p.m., well nothing further need be said.

Among the visitors were Messrs. C. Robinson, A. Burrow, S. Wigley, R. Cutts, F. Bourne (5BU), M. Brown (ex-5MB), and a well known old-timer, H. Brook (ex-5DP) who, incidentally, has been bitten by the bug again and should be heard on the air any time now under a new call. To these gentlemen we say welcome and hope to see you all again.

Frank 5MZ will be in Melbourne from 10th October until the 14th and is hoping to renew the friendships that he made on his last trip to VK3, and if possible meet some more of the local boys. He will then journey to Ballarat and remain there until the 18th. Frank is a keen Ham, and as he will be travelling with the South Australian Girls' Physical Culture and Dancing Team, which will be competing at the competitions, he should have some spare time to visit a few of the shacks in Ballarat. Look after him boys!

The Remembrance Day Contest has come and gone again and judging from the remarks heard on all sides the Contest this year was even more popular than previous years. I was on the wrong shift to take a very active part, but came on for the necessary contacts to qualify, although had I been able to take an active part in the Contest I don't think that I would have worried any of the competitors, judging by some of the scores that I heard even early on the Sunday morning. This Contest is without doubt the one Contest that all and sundry enter for in the spirit in which it was intended, but I feel, and possibly many others feel the same, that if individual States start running "tickets," organising teams to compete to the exclusion of individuals, and all and all running the Contest like an election campaign, then the spirit behind this annual get-together of fellow Hams will eventually be obliterated, to say nothing of the loss of a chance to pay our respects to a gallant band of "silent keys."

"Doc" 5MD has me a little worried, he greets everybody by the name of Micky, he has been seen practicing in his garden with several boomerangs, he has even been seen walking around in a pair of white shorts and shirt, in fact it would not surprise me if one day he sent me a smoke signal to the effect that "Him big medicine man go plurry walk-about." Very subtle, very subtle!

On the 27th August at 9 p.m. twenty metres was dead, and yet at 9.05 p.m. the same band was thick with the lucky ones who heard the Yanks break through at terrific strength. Quite a number of the regulars who habitate this band night after night were caught napping and have been as grumpy as bears with sore heads ever since. The DX stations were audible for more than three hours and brought back memories of the good old days to those who were lucky enough to hear them. Among the lucky ones to get their share were Lloyd 5QI, Harry 5HP, Ross 5LW, Les 5LC and John 5JW. One noticeable fact was that the boys with beams cornered the market, one noticeable exception being 5QI, but even he has been heard to admit that his new location is something out of the box.

Possibly I am a little sentimental or something, but I could not repress a pang of regret as I saw the gear of Merv. Brown (ex-5MB) going down at the auctioneer's hammer at the general meeting. If any gear in VK5 could tell a story of the early days of Ham Radio, that gear certainly could. I could not help but think back to that galvanised iron shed in the back yard of Merv's old home, where dozens of embryo Hams had taken code practice from him, who had struggled through the theory which he had always hammered into them, and had considered that the fitting reward for their night's work was climaxed if Merv would switch on his transmitter and call a CQ. Many a dream was born in that shed, and many a dream came true, only because of the fact that Merv. never gave up hope in a pupil, and it naturally followed a pupil never gave up hope. Incidentally, this Merv. joker used to carry my wife's school bag home from school, so I am told. She must have been one pupil that caused him to give up hope! "Yes, my sweet, I am coming now to help you with the dishes." You must keep in with these XYL's you know! In your hat, Brown!

Scott Little, 5AF, is the 1951-1952 winner of the Sir Ernest Fisk scholarship, awarded by the I.R.E. to a student who, in the opinion of the authorities of an approved institution, is considered to have shown the most promise in his radio studies. Congratulations Scott, member or non-member of the W.I.A., it all helps to keep the grand old game of Ham Radio well to the fore. I salute you.

5TW, at the time of writing, has left on a well earned holiday but before Tom left he found time to secure quite a number of contacts in the R.D. Contest. 5CH will be in town on the a.c. supply any day now. Claude has been heard on 2 mx a couple of times lately, so it would appear that the bug is still nibbling a little bit. 5JA is another one to be heard on 2 mx and John is welcomed back to the fold. 5MS is back on the air again and Stuart was heard knocking them over in the R.D. Contest. 5KU will have the beam finished before these notes are read, and Erg will be looking for some stations to try it out on. How did you go in the Contest OM? 5FD seemed to be working a few stations in the Contest, but John does not seem to have been very active this month. 5CJ has been very busy this month, but still Col found time to send in the usual batch of notes. He had a few contacts in the Contest and also manages to squeeze in a few minutes each day on 2 mx. Thanks for all Col.

I was foolish enough to mention over the air that I expected to have my new aerial mast up in the air any day now and to say that I regretted even alluding to the subject would be to put it mildly. Any hour of the day, strange faces could be seen peering over the back fence or looking through the gates and making audible remarks about the strong gales, about how masts crack under strain, in fact anything that could be said that would make me hesitate about putting up an up-to-date aerial system. Treating them all with ignore, I went on my way, whistling and singing, just to show them all that a Parsons never turns back and the day dawned when the super-dooper structure was ready. Hal 5AW and Jim 5JK came along the morning that it was to take the sky and cheerfully told me that they wanted to be in at the crash, but actually they took over the job and had the mast up in the air whilst I was trying vainly to push a ladder through the almond trees under the impression that I was

pushing against the mast. The job was a huge success and I thank them sincerely, but as I have been spending all my time answering the phone to the "Director of Air" who informed me that I must install aeroplane lights on top of the mast; to the "Director of Navigation," who informed me, with a voice suspiciously like that of Ross 5LW, that all shipping in the Gulf was at a stand-still because of the new buoy installed at Rose Park; and to all and sundry who felt like appointing themselves as "Directors of any Government Department" that came to their minds, I have as yet had no opportunity to try the aerial out. What about laying off it fellows, one day someone really important from a Government Department is going to ring me up on genuine business and will be slightly overcome when I tell him just what he can do.

5TL is at last on the air, Tom made a burst to get going for the R.D. Contest and has been heard on 80 and 40 mx fairly consistently ever since! Has also been dabbling with some simple 144 Mc. gear, but as yet has not applied the ergs. 5RE has returned from his extended holiday in VK6 and "Hobby" is reputed to have found out some of the VK6 gang's secrets. 5MA has been busy on his horticultural pursuits, planting orange trees, with the welcome assistance of 5TL and forwards a photo of these two hard workers in the midst of toil. I recognised you Fred, but was that an orange tree next to you holding the shovel? It was Tom! Well, well, tell him to wear a hat next time just for identification purposes.

5BC has had his nose to the grindstone and has not had much time for radio as a hobby, but has been heard on 40 mx once or twice. Hughie will be on holidays as these notes are being written, if my memory is OK, and also if he runs true to form. 5KW has been building some simple 80 mx gear for semi-portability and Harry has also been re-arranging his 144 Mc. gear. How have you been keeping OM? 5CF did his bit in the R.D. Contest and has been fitting his gear up in a rack and panel, or something. Have you heard 5SL yet Murray? Alex Kelly is still awaiting his call sign due to a slight delay over a small matter of details of his frequency meter. Alex will probably be on the air as these notes are being read. Here's hoping anyway.

The monthly meeting of the Upper Murray boys for August was held at the QTH of 5TL and the usual gang rolled up and many and varied were the subjects discussed. Special emphasis was stressed on the piping hot supper provided by Mrs. Laidler, as a matter of fact this supper business seems to be the main activity at these meetings. Could it be intended to make my mouth water. Shame on you Fred!

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## WESTERN AUSTRALIA

There was once a VK6 who thought the W.I.A. (W.A. Div.) smells. There are two of us now. My revised opinion of the "best Division of the best etc. etc." (to coin a phrase!) is brought about by the fact that the day after these notes have been written, the combined Annual Dinner of the VK6 Division and the Radio Society of W.A. will be held in Perth. Will I be there? Will the Division pay my return fare over 300 miles of air-travel? And my hotel expenses? Will they do all these things so that in a subsequent issue there may appear a brilliantly-written report of the season's most brilliant function? The answers are NO. And I consider the Division most unreasonable. After all, the Press is always invited to important shows. So, in the circumstances, all I can do is hope that by the time you are reading these notes you have got over the hangover, but can still remember some of the funny stories you heard on that night of nights.

During the month I was told that our untiring broadcasts officer, 6GH, almost broke his good record recently. So many have been the scientific bigwigs passing through our fair city and so frequent the late nights occasioned by these comings and goings, that George awoke with a rush one recent morning, looked at the clock, saw it was well after 9.30 and dived for the shack to put on 6WI and prepare to make suitable apologies to all concerned. Fortunately his XYL managed to prove to him in time that it was Saturday morning—not Sunday.

6JC, at Kalgoorlie, is about the baldest man in the business if what I hear is true. Jeff, it seems, has had "6MO-itis," i.e., modulator rebuilding fever and the shack floor is strewn with handfuls of hair—Jeff's hair. Talking of Kalgoorlie, reminds me to congratulate 6DX on his score in the R.D. Nice work, Bill. Another Kalgoorlie-ite should be a Cocos-ite by the time this hits print. 6HM has been posted to Cocos Island and has full intentions of taking his gear with him. Cocos should now be put properly on the map with 28 and 50 Mc. operation, but tell me, Chas., do you get a new prefix? Perhaps you'll be VKOHM next time we contact. Or are you a new country?

Heard a number of stations working VK3WI at the All-Models Exhibition and among them a VK4 who gave me food for one of those Ripley-isms which delight us all at times. VK4EL, it seems, is a technician at a National regional station which is about as far (or farther) up the East Coast of VK as is the local Regional on the West Coast whereat one, VK6EL works! Ern, incidentally, hasn't been on much of late what with a modulator power supply blowing up and being active with Boy Scouts, Buffs, and other organisations. But let the rumour get around (which doesn't seem likely till about 1954) that 10 mx is wide open and Ern will be back at Ham Radio with bells on!

Nothing heard from Kellerberrin yet, but we have hopes. Come on, Cyril, it only needs a concentrated effort like getting Peg to chop the wood for a week—and you'll be back on the air again.

6WR tells me his new eight-by-eight shack in the backyard is the goods. To use his own words, it's "well away from harmonics and XYLs and other disturbances." What I want to know, Bill, is why the plural? How many XYLs HAS the man got? My advice to Bill is to install an intercom unit between house and shack and keep it in first-class order and always dutifully answer it—for the first month or two. Then, when the choice DX is coming through, remove a wire from a strategic place on the intercom, replacing it again when conditions are not so hot.

6DJ tells me 7 Mc. conditions in the early morning can sometimes yield a piece of DX. Bill worked a G4 at 5 o'clock one August morning. Brrr! And August is our coldest month, too!

Another of the QQEO-stroke-something-stroke-something else addicts is 6JW who now has one of the animals sitting up and begging on 50 Mc. My regular spy who reports the doings of the metropolitan gang on those frequencies which I do not hear here has gone a.w.l. this month and if it were not for Rolo there'd be little or nothing to print. And I'd better be nice to Rolo in future for he has threatened that if I grizzle any more he'll keep me waiting three months instead of two. So just to show you how much I like you Rolo, I'll "snitch" some of your dope for this column and leave the 50 Mc. and higher for the other section.

Rolo's comments on 21 Mc. are: "This band is still not used very much by VK6s. I have had many decent contacts with VKs 2, 3, 4, 5 and 9 and also with ZL. Heard a VE7 on c.w. for about 6½ hours"—note that, gentlemen, there's obviously a household where the XYL DOES cut the wood!—"but had no v.f.o. and no crystal near him. At various times I've heard 6AR and 6DW being called and, I believe, 6EC too." Thanks Rolo.

One final word, gentle reader. If you don't like the notes as they were last month and have been again this time, how about dropping me a line and giving me some gen for next time?

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## TASMANIA

The general meeting for September was held in the Photographic Society's Room, with Lon 7LJ presiding, in the absence of Mr. Bob O'May. The item of business which commanded the most attention was that in connection with a new club room. Various pros and cons were advanced, and the general concensus of opinion seemed to be that it would be much more satisfactory if the Institute possessed its own club room, providing that the financial side could be satisfactorily covered. I would suggest that members give a little more thought to the matter, and I hope I am not striking a too optimistic note when I say that by the time these notes are published, another proposition may be forthcoming, which is likely to meet all our requirements.

The latter part of the evening was covered by Len 7LE with a lecture entitled "Getting Power into the Aerial." Len presented his lecture capably, and after coping with various questions at the conclusion, was shown in no uncertain manner how much it was appreciated by those present.

Our congratulations go to D. M. Richardson, 7MR, and S. Medford, 7SF, on attaining full membership of the Institute, and we also welcome to our ranks the following Associate Members: E. A. Beard, W. K. Moses, A. Pryke, H. Matuszewski, and H. Rittman. We hope that it will not be too long before we are congratulating the latter members on their elevation to full membership also.

Well, just as I feared, the Remembrance Day Contest has left in its wake, a dearth of news which I find hard to overcome at the moment. I hope this famine will break in the next few weeks, but as the saying goes, "It's an ill wind that blows no one any good." I find myself in the happy position of being able to give the maximum co-operation to a general editorial request to cut down on space required for notes. Most members are aware of the reasons underlying the above request, and I sincerely hope that the necessity for same is of very short duration.

### NORTHERN ZONE

Our last zone meeting took the form of a general discussion night. 7GM came up with a beauty over modulation reports and is still wondering why his 80 metre reports say his percent. modulation is down when his c.r.o. says its 100 per cent. Yet with the same modulation on 40, he gets reports of full modulation. 7TE and 7HY appeared in the R.D. Contest, so did practically all Amateurs in the Northern Zone. 7LX, with a crystal controlled 6w. job, collected quite a few points and proved once again that a low powered rig can get out. 7RK now has his electronic keyer working beautifully. 7BQ now has a new receiver to play with—one he brought back from G land. From 7LZ comes news that his and 7PF's second channel Command receivers are working well and both are happy with them.

7XW overcame his power transformer trouble in time for the Contest and decided to go the full way with his 807 final so jacked up the input to 60w. Pity 7LX, who now has two 60 watters, 7RK and 7XW, each about 100 yards away from him. Ken is going in for reprisals as he has a new multiband 100w. Tx nearly finished. Max 7CA is still upholding zone honour on 7 Mc., but 7DB, 7AM, 7DS and 7RB appear to be somewhat inactive. In closing this month's notes, we want to award a rare orchid to the gent in VK2 who in the R.D. Contest called CQ about 50 times and ended up with CQ, CQ, this is VK2—— standing by for the CQ Contest.

### NORTH WESTERN ZONE

It seems that Tasmania has put a very good effort into the R.D. Contest, all the local stations sent in a log and I believe 7KB will have the top score for the State, nice work Ian. Working the full time is certainly worth the effort, even if it is hard to keep awake at times. 7WA and 7SF also did a good job, though 7SF would have done better if QRM had not been so strong. A number of new stations were on for the Contest. Some of which were 7MR and 7SF and others. 7DM was also heard doing his share, have not heard much of 7AI of late, hope you are alright Ken.

The monthly meeting was held at the home of yours truly and it was decided to hold the next meeting at the Technical School. 7KB decided to continue his appointment as President of the zone. 7AL paid us a short, but enjoyable, visit. Hope to see more of the members from the south in the near future.

## HAMADS

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